



Formosa Plastics®

Formosa Plastics Corporation, Texas
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Telephone: 361-987-7000

January 30, 2019

Certified Mail: 7018 0360 0000 5327 9320
Air Section Manager, Region 14
Texas Commission Environmental Quality
6300 Ocean Drive, Suite 1200
Corpus Christi, Texas 78412

RE: Formosa Plastics Corporation, Texas
TCEQ Air Quality Account No. CB-0038-Q
Fourth Quarter 2018 SUMMA Canister Report

Dear Air Section Manager:

Per your request, we have enclosed a quarterly summary of results from the Point Comfort SUMMA Canister Monitoring System. The fourth quarter of 2018 results are shown for each site on the attached tables. Additionally, we have included wind roses generated by the weather sensor on the FTIR or wind direction data from other air monitoring devices for each SUMMA canister sampling date during the fourth quarter of 2018.

Beginning with the first sample date in the fourth quarter 2003, we have also included average wind speed and wind direction on the tables. This was done at the request of Mr. David Carmichael of the TCEQ Austin office. In addition, at the request of Mr. Carmichael, the following changes have been made to the tables:

The duplicate sample data for all compounds has been removed from the VOC Canister Analysis Tables;

The averaged duplicate sample data was replaced with only the routine sample data in the VOC Canister Analysis Tables; and

An additional VOC Canister Analysis Table was created for the duplicate samples data. This was done so that the relative percent difference (RPD) could be calculated. The calculation for obtaining the RPD is shown in the Duplicate Sample section of the attached Calculation Methodology.

During a telephone conversation with Mr. Vincent Leopold (TCEQ TARA Group) on April 9, 1998, he requested a disk copy of the SUMMA Canister sampling results be included with the quarterly report. Enclosed is an electronic copy of the fourth quarter 2018 SUMMA Canister Report.

Should you have any questions please contact Vanessa Peppers by e-mail at VanessaP@ftpc.fpcusa.com.

Sincerely,



Rick Crabtree
Vice President/General Manager
Formosa Plastics Corporation, Texas

Attachments

January 30, 2019

Page 3

cc: Dr. Tracie Phillips
Toxicology Division
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Certified Mail: 7018 0360 0000 5327 9351

FORMOSA PLASTICS CORPORATION, TEXAS

SUMMA CANISTER QUARTERLY REPORT

CALCULATION METHODOLOGY

Following is the calculation methodologies used to calculate the Year-To-Date Sum and Year-To-Date Average for the four SUMMA canister sampling sites. Please note, there are two columns associated with each component analyzed. The column titled "Actual" represents the results reported by the independent laboratory contracted to analyze the SUMMA canisters. The column titled "½ Reported LOD (Limit of Detection)" represents either the actual result or one-half the limit of detection reported by the laboratory, as appropriate.

ACTUAL

The following is entered into the column titled "Actual":

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to date average;

ND (Non Detect) - As reported by the laboratory. The value of "0" is used to calculate the year to date sum and the year-to-date average;

BDL (Below Detection Limit) - Entered when the actual result is less than the reported limit of detection. The value of "0" is used to calculate the year-to-date sum and the year-to-date average;

"*" - Non operational sampling period.

½ REPORTED LOD (LIMIT OF DETECTION)

The following is entered into the column titled "½ Reported LOD":

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to-date average;

½ the Reported Limit of Detection - ½ the reported limit of detection when the results are reported as non-detect and when the actual result is below the detection limit (BDL). ½ the reported limit of detection is used to calculate the year-to-date sum and the year-to-date average.

"*" - Non operational sampling period.

FORMOSA PLASTICS CORPORATION, TEXAS

SUMMA CANISTER QUARTERLY REPORT

Limit of Detection (LOD) - Method Detection Limit, Limit of Detection, Reporting Limit, etc... as reported by the independent laboratory conducting the analysis.

DUPLICATE SAMPLES

Beginning with the revised First Quarter 2004 Report, submitted on October 22, 2004, the duplicate samples will be reported discreetly on a separate VOC Canister Analysis Table. This is done so that the duplicate samples can be compared to the routine samples and the Relative Percent Difference (RPD) can be calculated. The RPD is calculated using the following equation:

$$\{(X1-X2) / [(X1+X2) / 2]\} \times 100$$

Mr. David Carmichael provided this equation in his August 20, 2004 e-mail request for changes. Where the duplicate and routine sample indicated "ND", the RPD is reported as "ND". Where the duplicate or routine sample indicated "ND" and the other indicated a concentration greater than ND, the RPD is calculated by using the value entered in the actual concentration column and the value entered in the 1/2 Reported LOD column.

YEAR-TO-DATE SUM

The year-to-date sum is calculated by taking the sum of all values entered in the column.

YEAR-TO-DATE AVERAGE

The following formula is used to calculate the year-to-date average:

Year-To-Date Sum / (Number of theoretical sample periods - Number of non operational sample periods)

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - CITY HALL SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 1/5/2018 | 71 | 5.0 | * | * | * | * | * | * | * | * | * | * |
| 1/11/2018 | 202 | 8.9 | * | * | * | * | * | * | * | * | * | * |
| 1/17/2018 | 311 | 4.2 | * | * | * | * | * | * | * | * | * | * |
| 1/23/2018 | 275 | 4.0 | * | * | * | * | * | * | * | * | * | * |
| 1/29/2018 | 341 | 5.6 | * | * | * | * | * | * | * | * | * | * |
| 2/4/2018 | 197 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.2470 | 0.2470 | ND | 0.0500 | 0.1070 | 0.1070 |
| 2/10/2018 | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.8060 | 0.8060 | 0.6680 | 0.0500 | ND | 0.0500 |
| 2/16/2018 | 147 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.4030 | 0.4030 | ND | 0.0500 | 1.7000 | 1.7000 |
| 2/22/2018 | 315 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 2/28/2018 | 145 | 10.1 | ND | 0.0500 | 0.377 | 0.3770 | 1.6500 | 1.6500 | ND | 0.0500 | * | * |
| 3/6/2018 | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.8420 | 0.8420 | 0.4750 | 0.0500 | ND | 0.0500 |
| 3/12/2018 | 279 | 7.4 | ND | 0.0500 | ND | 0.1250 | 0.5510 | 0.5510 | 0.6320 | 0.0500 | 0.2470 | 0.2470 |
| 3/18/2018 | 125 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.1690 | 0.1690 | ND | 0.0500 | ND | 0.0500 |
| 3/24/2018 | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.2300 | 0.2300 | ND | 0.0500 | ND | 0.0500 |
| 3/30/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.4860 | 0.4860 | 0.4690 | 0.0500 | ND | 0.0500 |
| 4/5/2018 | 96 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.1990 | 0.1990 | ND | 0.0500 | 0.1390 | 0.1390 |
| 4/11/2018 | 114 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.3390 | 0.3390 | 0.1510 | 0.0500 | 0.1160 | 0.1160 |
| 4/17/2018 | 144 | 9.7 | ND | 0.0500 | ND | 0.1250 | 0.3190 | 0.3190 | ND | 0.0500 | 0.1730 | 0.1730 |
| 4/23/2018 | 243 | 1.2 | ND | 0.0500 | ND | 0.1250 | 0.2270 | 0.2270 | 2.5900 | 2.5900 | ND | 0.0500 |
| 4/29/2018 | 106 | 5.5 | ND | 0.0500 | ND | 0.1250 | 0.1580 | 0.1580 | ND | 0.0500 | 0.8170 | 0.8170 |
| 5/5/2018 | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.4130 | 0.4130 | 0.9900 | 0.9900 | ND | 0.0500 |
| 5/11/2018 | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | 0.1340 | 0.1340 | ND | 0.0500 | 0.2730 | 0.2730 |
| 5/17/2018 | 159 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.1250 | 0.1250 | ND | 0.0500 | ND | 0.0500 |
| 5/23/2018 | 96 | 5.2 | * | * | * | * | * | * | ND | 0.0500 | ND | 0.0500 |
| 5/29/2018 | 144 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.1680 | 0.1680 | ND | 0.0500 | * | * |
| 6/4/2018 | 169 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.1800 | 0.1800 | ND | 0.0500 | 0.1630 | 0.1630 |
| 6/10/2018 | 140 | 8.8 | ND | 0.0500 | ND | 0.1250 | 0.1750 | 0.1750 | 0.1090 | 0.1090 | 0.1030 | 0.1030 |
| 6/16/2018 | 114 | 8.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/22/2018 | 151 | 4.9 | ND | 0.0500 | ND | 0.1250 | 0.2280 | 0.2280 | ND | 0.0500 | ND | 0.0500 |
| 6/28/2018 | 143 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.2150 | 0.2150 | ND | 0.0500 | 0.1380 | 0.1380 |
| 7/4/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.1020 | 0.1020 | 0.8600 | 0.8600 | ND | 0.0500 |
| 7/10/2018 | 121 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.3820 | 0.3820 | ND | 0.0500 | 6.1100 | 6.1100 |
| 7/16/2018 | 153 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.2210 | 0.2210 | ND | 0.0500 | ND | 0.0500 |
| 7/22/2018 | 176 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.1850 | 0.1850 | ND | 0.0500 | 0.1760 | 0.1760 |
| 7/28/2018 | 133 | 4.0 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1990 | 0.1990 |
| 8/3/2018 | 107 | 4.1 | ND | 0.0500 | ND | 0.1250 | 0.3850 | 0.3850 | 0.6580 | 0.6580 | ND | 0.0500 |
| 8/9/2018 | 138 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.2890 | 0.2890 | ND | 0.0500 | 0.7690 | 0.7690 |
| 8/17/2018 | 135 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.1220 | 0.1220 | ND | 0.0500 | ND | 0.0500 |
| 8/21/2018 | 155 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.1930 | 0.1930 | ND | 0.0500 | ND | 0.0500 |
| 8/29/2018 | 121 | 4.3 | ND | 0.0500 | ND | 0.1250 | 0.1530 | 0.1530 | 0.7720 | 0.7720 | 0.1020 | 0.1020 |
| 9/12/2018 | 91 | 1.8 | ND | 0.0500 | ND | 0.1250 | * | * | ND | 0.0500 | 0.9860 | 0.9860 |
| 9/18/2018 | 60 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.1490 | 0.1490 | ND | 0.0500 | 0.1100 | 0.1100 |
| 9/24/2018 | 187 | 1.3 | * | * | * | * | * | * | ND | 0.0500 | * | * |
| 9/30/2018 | 115 | 4.5 | ND | 0.0500 | ND | 0.1250 | 0.5390 | 0.5390 | 2.3200 | 2.3200 | ND | 0.0500 |
| 10/6/2018 | 126 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5390 | 0.5390 | 2.3200 | 2.3200 | ND | 0.0500 |
| 10/12/2018 | 88 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.4490 | 0.4490 | 0.7060 | 0.7060 | 2.0900 | 2.0900 |
| 10/18/2018 | 343 | 4.9 | 0.6490 | 0.6490 | ND | 0.1250 | 0.6530 | 0.6530 | 0.9220 | 0.9220 | ND | 0.0500 |
| 10/26/2018 | 249 | 1.5 | 0.6510 | 0.6510 | ND | 0.1250 | 0.3480 | 0.3480 | 0.3960 | 0.3960 | 0.1230 | 0.1230 |
| 11/1/2018 | 324 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 11/7/2018 | 157 | 4.8 | ND | 0.0500 | 0.275 | 0.2750 | 0.1720 | 0.1720 | ND | 0.0500 | ND | 0.0500 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - CITY HALL SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 11/13/2018 | 321 | 7.6 | ND | 0.0500 | ND | 0.1250 | 0.1190 | 0.1190 | ND | 0.0500 | ND | 0.0500 |
| 11/17/2018 | 88 | 4.5 | * | * | * | * | * | * | * | * | * | * |
| 11/25/2018 | 316 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.2070 | 0.2070 | ND | 0.0500 | ND | 0.0500 |
| 12/1/2018 | 240 | 2.7 | ND | 0.0500 | ND | 0.1250 | 0.1750 | 0.1750 | ND | 0.0500 | ND | 0.1220 |
| 12/7/2018 | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.2320 | 0.2320 | ND | 0.0500 | ND | 0.0500 |
| 12/13/2018 | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1500 | 0.1500 | ND | 0.0500 | ND | 0.0500 |
| 12/19/2018 | 15 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.2280 | 0.2280 | 0.1510 | 0.1510 | ND | 0.2110 |
| 12/25/2018 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1090 | 0.1090 | ND | 0.0500 | ND | 0.0500 |
| 12/31/2018 | 334 | 4.2 | ND | 0.0500 | ND | 0.1250 | 0.1970 | 0.1970 | ND | 0.0500 | ND | 0.0500 |

| | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| Year-To-Date Sum | 1.3000 | 3.6500 | 0.6520 | 6.5270 | 14.0230 | 14.2230 | 12.8690 | 14.5190 | 16.2140 | 17.5140 |
| Rolling Year Average | 0.0265 | 0.0745 | 0.0133 | 0.1332 | 0.2862 | 0.2903 | 0.2626 | 0.2963 | 0.3309 | 0.3574 |
| Annual Average | 0.0265 | 0.0745 | 0.0133 | 0.1332 | 0.2862 | 0.2903 | 0.2626 | 0.2963 | 0.3309 | 0.3574 |

Number of theoretical sample periods

Number of non operational sample periods

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

| TCEQ Air Monitoring Comparison Values (ppb) | | | | Investigation | |
|---|---------|------|--|---------------|--|
| Chemical | ST | L.T | | Limit (ppb) | |
| Vinyl Chloride | 27,000 | 0.47 | | 25 | |
| Ethylene Dichloride | 94 | 0.72 | | 29.7 | |
| Benzene | 180 | 1.4 | | 28.2 | |
| Ethylene | 500,000 | 30 | | 500 | |
| 1, 3 Butadiene | 1,700 | 9 | | 25 | |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - CITY HALL
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 02/10/18 | 94 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.8060 | 0.8060 | 0.6680 | 0.6680 | ND | 0.0500 |
| 02/10/18 _d | 94 | 5.4 | ND | 0.0500 | ND | 0.1250 | 1.1600 | 1.1600 | 0.8460 | 0.8460 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -36.0122 | | -23.5139 | | ND | |
| 03/12/18 | 279 | 7.4 | ND | 0.0500 | ND | 0.1250 | 0.5510 | 0.5510 | 0.6320 | 0.6320 | ND | 0.0500 |
| 03/12/18 _d | 279 | 7.4 | ND | 0.0500 | ND | 0.1250 | 0.4600 | 0.4600 | 0.5360 | 0.5360 | 0.1140 | 0.1140 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 18.0020 | | 16.4384 | | -78.0488 | |
| 03/24/18 | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.2300 | 0.2300 | ND | 0.0500 | ND | 0.0500 |
| 03/24/18 _d | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.2310 | 0.2310 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -0.4338 | | ND | | ND | |
| 05/05/18 | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.4130 | 0.4130 | 0.9900 | 0.9900 | 0.2730 | 0.2730 |
| 05/05/18 _d | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.3700 | 0.3700 | 1.2000 | 1.2000 | 0.1500 | 0.1500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 10.9834 | | -19.1781 | | 58.1560 | |
| 06/16/18 | 114 | 8.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 06/16/18 _d | 114 | 8.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | ND | | ND | | ND | |
| 07/16/18 | 153 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.2210 | 0.2210 | ND | 0.0500 | 0.1760 | 0.1760 |
| 07/16/18 _d | 153 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.2380 | 0.2380 | ND | 0.0500 | 0.1720 | 0.1720 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -7.4074 | | ND | | 2.2989 | |
| 09/30/18 | 65 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5390 | 0.5390 | 2.3200 | 2.3200 | 1.2400 | 1.2400 |
| 09/30/18 _d | 65 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5620 | 0.5620 | 2.3100 | 2.3100 | 1.1400 | 1.1400 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -4.1780 | | 0.4320 | | 8.4034 | |
| 11/01/18 | 324 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 11/01/18 _d | 324 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 12/25/18 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1090 | 0.1090 | ND | 0.0500 | ND | 0.0500 |
| 12/25/18 _d | 106 | 5.9 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - FORMOSA TRAINING COMPLEX

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 1/5/2018 | 71 | 5.0 | * | * | * | * | * | * | * | * | * | * |
| 1/11/2018 | 202 | 8.9 | * | * | * | * | * | * | * | * | * | * |
| 1/17/2018 | 311 | 4.2 | * | * | * | * | * | * | * | * | * | * |
| 1/23/2018 | 275 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.5740 | 0.5740 | 0.6610 | 0.6610 | ND | 0.0500 |
| 1/29/2018 | 341 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.1420 | 0.1420 | ND | 0.0500 | ND | 0.0500 |
| 2/4/2018 | 197 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.4520 | 0.4520 | 0.2290 | 0.2290 | 0.1430 | 0.1430 |
| 2/10/2018 | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.5940 | 0.5940 | 0.8710 | 0.8710 | ND | 0.0500 |
| 2/16/2018 | 147 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.1250 | 0.1250 | ND | 0.0500 | 2.9300 | 2.9300 |
| 2/22/2018 | 315 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 2/28/2018 | 145 | 10.1 | ND | 0.0500 | 0.371 | 0.3710 | 1.8500 | 1.8500 | ND | 0.0500 | 0.1300 | 0.1300 |
| 3/6/2018 | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.9270 | 0.9270 | 1.5500 | 1.5500 | 0.2600 | 0.2600 |
| 3/12/2018 | 279 | 7.4 | ND | 0.0500 | ND | 0.1250 | 0.4440 | 0.4440 | 0.1130 | 0.1130 | ND | 0.0500 |
| 3/18/2018 | 125 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.2560 | 0.2560 | ND | 0.0500 | ND | 0.0500 |
| 3/24/2018 | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.2090 | 0.2090 | ND | 0.0500 | ND | 0.0500 |
| 3/30/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.5750 | 0.5750 | 0.6040 | 0.6040 | ND | 0.0500 |
| 4/5/2018 | 96 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.2700 | 0.2700 | 0.3370 | 0.3370 | 0.3560 | 0.3560 |
| 4/11/2018 | 114 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.3620 | 0.3620 | 0.4940 | 0.4940 | 0.5740 | 0.5740 |
| 4/17/2018 | 144 | 9.7 | ND | 0.0500 | ND | 0.1250 | 0.1600 | 0.1600 | ND | 0.0500 | 0.1270 | 0.1270 |
| 4/23/2018 | 243 | 1.2 | ND | 0.0500 | ND | 0.1250 | 0.3330 | 0.3330 | 1.3800 | 1.3800 | 0.3610 | 0.3610 |
| 4/29/2018 | 106 | 5.5 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | ND | 0.0500 | ND | 0.0500 |
| 5/5/2018 | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.1030 | 0.1030 | ND | 0.0500 | ND | 0.0500 |
| 5/11/2018 | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | 0.1170 | 0.1170 | ND | 0.0500 | ND | 0.0500 |
| 5/17/2018 | 159 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.1250 | 0.1250 | ND | 0.0500 | ND | 0.0500 |
| 5/23/2018 | 96 | 5.2 | * | * | * | * | * | * | * | * | * | * |
| 5/29/2018 | 144 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.1380 | 0.1380 | ND | 0.0500 | 0.1160 | 0.1160 |
| 6/4/2018 | 169 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.0500 | 0.0500 | ND | 0.0500 | 0.1160 | 0.1160 |
| 6/10/2018 | 140 | 8.8 | ND | 0.0500 | ND | 0.1250 | 0.1450 | 0.1450 | ND | 0.0500 | 0.3220 | 0.3220 |
| 6/16/2018 | 114 | 8.9 | ND | 0.0500 | ND | 0.1250 | 0.0500 | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/22/2018 | 151 | 4.9 | ND | 0.0500 | ND | 0.1250 | 0.1790 | 0.1790 | ND | 0.0500 | 0.1930 | 0.1930 |
| 6/28/2018 | 143 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.1490 | 0.1490 | ND | 0.0500 | 0.3960 | 0.3960 |
| 7/4/2018 | 126 | 7.1 | * | * | * | * | * | * | * | * | * | * |
| 7/10/2018 | 121 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.2370 | 0.2370 | ND | 0.0500 | ND | 0.0500 |
| 7/16/2018 | 153 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.2580 | 0.2580 | ND | 0.0500 | 0.1030 | 0.1030 |
| 7/22/2018 | 176 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | ND | 0.0500 | 0.1330 | 0.1330 |
| 7/28/2018 | 133 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.1810 | 0.1810 | ND | 0.0500 | ND | 0.0500 |
| 8/3/2018 | 107 | 4.1 | ND | 0.0500 | ND | 0.1250 | 0.2720 | 0.2720 | 1.6000 | 1.6000 | 0.1470 | 0.1470 |
| 8/9/2018 | 138 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1350 | 0.1350 |
| 8/17/2018 | 135 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.1340 | 0.1340 | ND | 0.0500 | 0.2690 | 0.2690 |
| 8/21/2018 | 155 | 5.4 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1020 | 0.1020 |
| 8/29/2018 | 121 | 4.3 | ND | 0.0500 | ND | 0.1250 | 0.3340 | 0.3340 | 0.7480 | 0.7480 | 1.2500 | 1.2500 |
| 9/6/2018 | 91 | 1.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1140 | 0.1140 |
| 9/12/2018 | 60 | 4.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | * | * |
| 9/18/2018 | 187 | 1.3 | * | * | * | * | * | * | * | * | * | * |
| 9/24/2018 | 115 | 4.5 | ND | 0.0500 | ND | 0.1250 | 0.1860 | 0.1860 | ND | 0.0500 | ND | 0.0500 |
| 9/30/2018 | 65 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.6890 | 0.6890 | 2.7400 | 2.7400 | 2.2600 | 2.2600 |
| 10/6/2018 | 126 | 7.1 | * | * | * | * | * | * | * | * | * | * |
| 10/12/2018 | 88 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.4090 | 0.4090 | 1.3300 | 1.3300 | 3.9700 | 3.9700 |
| 10/18/2018 | 343 | 4.9 | 1.2200 | 1.2200 | ND | 0.1250 | 0.5310 | 0.5310 | 1.3900 | 1.3900 | ND | 0.0500 |
| 10/26/2018 | 249 | 1.5 | * | * | * | * | * | * | * | * | * | * |
| 11/1/2018 | 324 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 11/11/2018 | 24 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.5490 | 0.5490 | 0.6790 | 0.6790 | 0.3280 | 0.3280 |
| 11/17/2018 | 88 | 4.5 | ND | 0.0500 | ND | 0.1250 | 0.1320 | 0.1320 | ND | 0.0500 | ND | 0.0500 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 11/23/2018 | 46 | 0.4 | ND | 0.0500 | ND | 0.1250 | 0.2610 | 0.2610 | 0.7120 | 0.7120 | 0.6110 | 0.6110 |
| 11/29/2018 | 145 | 3.2 | ND | 0.0500 | 0.272 | 0.2720 | 0.4590 | 0.4590 | ND | 0.0500 | 0.3840 | 0.3840 |
| 12/1/2018 | 240 | 2.7 | ND | 0.0500 | ND | 0.1250 | 0.2100 | 0.2100 | ND | 0.0500 | ND | 0.0500 |
| 12/7/2018 | 102 | 1.9 | * | * | * | * | * | * | * | * | * | * |
| 12/13/2018 | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1570 | 0.1570 | ND | 0.0500 | ND | 0.0500 |
| 12/19/2018 | 15 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.2440 | 0.2440 | 0.1320 | 0.1320 | 0.4010 | 0.4010 |
| 12/25/2018 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1430 | 0.1430 | ND | 0.0500 | ND | 0.0500 |
| 12/31/2018 | 334 | 4.2 | ND | 0.0500 | ND | 0.1250 | 0.2340 | 0.2340 | ND | 0.0500 | ND | 0.0500 |

| | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| Year-To-Date Sum | 1.2200 | 3.6200 | 0.6430 | 6.5180 | 14.0650 | 14.3650 | 15.5700 | 17.1700 | 16.3580 | 17.4080 |
| Rolling Year Average | 0.0249 | 0.0739 | 0.0131 | 0.1330 | 0.2870 | 0.2932 | 0.3178 | 0.3504 | 0.3338 | 0.3553 |
| Annual Average | 0.0249 | 0.0739 | 0.0131 | 0.1330 | 0.2870 | 0.2932 | 0.3178 | 0.3504 | 0.3338 | 0.3553 |

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

| TCEQ Air Monitoring Comparison Values (ppb) | | | Investigation Limit (ppb) |
|---|---------|------|---------------------------|
| Chemical | ST | LT | |
| Vinyl Chloride | 27,000 | 0.47 | 25 |
| Ethylene Dichloride | 94 | 0.72 | 29.7 |
| Benzene | 180 | 1.4 | 28.2 |
| Ethylene | 500,000 | 30 | 500 |
| 1,3 Butadiene | 1,700 | 9 | 25 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - FORMOSA TRAINING COMPLEX
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 02/04/18 | 197 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.4520 | 0.4520 | 0.2290 | 0.2290 | 0.1430 | 0.1430 |
| 02/04/18d | 197 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.8140 | 0.8140 | 0.3260 | 0.3260 | 0.2240 | 0.2240 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -57.1880 | | -34.9550 | | -44.1417 | |
| 03/06/18 | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.9270 | 0.9270 | 1.5500 | 1.5500 | 0.2600 | 0.2600 |
| 03/06/18d | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.9640 | 0.9640 | 1.6900 | 1.6900 | 0.2860 | 0.2860 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -3.9133 | | -8.6420 | | -9.5238 | |
| 07/22/18 | 176 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | ND | 0.0500 | 0.1330 | 0.1330 |
| 07/22/18d | 176 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.1190 | 0.1190 | ND | 0.0500 | 0.1490 | 0.1490 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -9.6916 | | ND | | -11.3475 | |
| 08/09/18 | 138 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1350 | 0.1350 |
| 08/09/18d | 138 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1750 | 0.1750 |
| Relative Percent Difference (RPD) | | | ND | | ND | | ND | | ND | | -25.8065 | |
| 09/12/18 | 60 | 4.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1140 | 0.1140 |
| 09/12/18d | 60 | 4.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1130 | 0.1130 |
| Relative Percent Difference (RPD) | | | ND | | ND | | ND | | ND | | 0.8811 | |
| 10/18/18 | 343 | 4.9 | 1.2200 | 1.2200 | ND | 0.1250 | 0.5310 | 0.5310 | 1.3900 | 1.3900 | ND | 0.0500 |
| 10/18/18d | 343 | 4.9 | 0.5900 | 0.5900 | ND | 0.1250 | 0.4390 | 0.4390 | 1.3400 | 1.3400 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | 69.6133 | | ND | | 18.9691 | | 3.6630 | | ND | |

d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 1/5/2018 | 71 | 5.0 | * | * | * | * | * | * | * | * | * | * |
| 1/11/2018 | 202 | 8.9 | * | * | * | * | * | * | * | * | * | * |
| 1/17/2018 | 311 | 4.2 | * | * | * | * | * | * | * | * | * | * |
| 1/23/2018 | 275 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.4990 | 0.4990 | 0.7540 | 0.7540 | ND | 0.0500 |
| 1/29/2018 | 341 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.2730 | 0.2730 | ND | 0.0500 | ND | 0.0500 |
| 2/4/2018 | 197 | 5.2 | ND | 0.0500 | ND | 0.1250 | 0.2950 | 0.2950 | 0.2240 | 0.2240 | ND | 0.0500 |
| 2/10/2018 | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.3350 | 0.3350 | 0.3040 | 0.3040 | ND | 0.0500 |
| 2/16/2018 | 147 | 5.1 | ND | 0.0500 | ND | 0.2500 | 0.1040 | 0.1040 | ND | 0.0500 | ND | 0.0500 |
| 2/22/2018 | 315 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.5570 | 0.5570 | 2.6200 | 2.6200 | ND | 0.0500 |
| 2/28/2018 | 145 | 10.1 | ND | 0.0500 | ND | 0.1250 | 1.0400 | 1.0400 | ND | 0.0500 | ND | 0.1050 |
| 3/6/2018 | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.6710 | 0.6710 | 1.1100 | 1.1100 | 0.2140 | 0.2140 |
| 3/12/2018 | 279 | 7.4 | ND | 0.0500 | ND | 0.1250 | 0.4470 | 0.4470 | 0.4200 | 0.4200 | 0.3760 | 0.3760 |
| 3/18/2018 | 125 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.1820 | 0.1820 | ND | 0.0500 | ND | 0.0500 |
| 3/24/2018 | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.2610 | 0.2610 | ND | 0.0500 | ND | 0.0500 |
| 3/30/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.3940 | 0.3940 | 1.0300 | 1.0300 | ND | 0.0500 |
| 4/5/2018 | 96 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.2170 | 0.2170 | 1.3200 | 1.3200 | 1.2200 | 1.2200 |
| 4/11/2018 | 114 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.5800 | 0.5800 | 1.4100 | 1.4100 | 1.1100 | 1.1100 |
| 4/17/2018 | 144 | 9.7 | ND | 0.0500 | ND | 0.1250 | 0.2230 | 0.2230 | ND | 0.0500 | ND | 0.0500 |
| 4/23/2018 | 243 | 1.2 | ND | 0.0500 | ND | 0.1250 | 0.5180 | 0.5180 | 0.3960 | 0.3960 | ND | 0.0500 |
| 4/29/2018 | 106 | 5.5 | ND | 0.0500 | ND | 0.1250 | 0.2900 | 0.2900 | ND | 0.0500 | ND | 0.1550 |
| 5/5/2018 | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.0500 | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 5/11/2018 | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | 0.1190 | 0.1190 | ND | 0.0500 | ND | 0.0500 |
| 5/17/2018 | 159 | 6.0 | ND | 0.0500 | ND | 0.2500 | 0.1250 | 0.1250 | ND | 0.0500 | ND | 0.0500 |
| 5/23/2018 | 96 | 5.2 | * | * | * | * | * | * | * | * | * | * |
| 5/29/2018 | 144 | 5.2 | ND | 0.0500 | ND | 0.1250 | ND | ND | ND | 0.0500 | 0.1840 | 0.1840 |
| 6/4/2018 | 169 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.1130 | 0.1130 | 0.1540 | 0.1540 | 0.1630 | 0.1630 |
| 6/10/2018 | 140 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | ND | ND | 0.0500 | 0.1360 | 0.1360 |
| 6/16/2018 | 114 | 8.9 | ND | 0.0500 | ND | 0.1250 | ND | ND | ND | 0.0500 | ND | 0.0500 |
| 6/22/2018 | 151 | 4.9 | ND | 0.0500 | ND | 0.1250 | 0.1380 | 0.1380 | ND | 0.0500 | 0.2250 | 0.2250 |
| 6/28/2018 | 143 | 7.0 | ND | 0.0500 | ND | 0.1250 | ND | ND | ND | 0.0500 | ND | 0.0500 |
| 7/4/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.3940 | 0.3940 | 1.0300 | 1.0300 | ND | 0.0500 |
| 7/10/2018 | 121 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.1750 | 0.1750 | ND | 0.0500 | ND | 0.0500 |
| 7/16/2018 | 153 | 5.9 | ND | 0.0500 | | | | | | | | |

FORMOSA VOC CANISTER ANALYSIS 4th QUARTER 2018 POINT COMFORT - PARK SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 10/6/2018 | 126 | 7.1 | * | * | * | * | * | * | * | * | * | * |
| 10/12/2018 | 88 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.2730 | 0.2730 | 2.7200 | 2.7200 | 7.3000 | 7.3000 |
| 10/18/2018 | 343 | 4.9 | 0.5680 | 0.5680 | ND | 0.1250 | 0.8150 | 0.8150 | 2.0600 | 2.0600 | 0.1260 | 0.1260 |
| 10/26/2018 | 249 | 1.5 | 0.5910 | 0.5910 | ND | 0.1250 | 0.2160 | 0.2160 | ND | 0.0500 | ND | 0.0500 |
| 11/1/2018 | 324 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.0000 | 0.0000 | 0.2380 | 0.2380 | 0.6500 | 0.6500 |
| 11/7/2018 | 157 | 4.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 11/13/2018 | 321 | 7.6 | ND | 0.0500 | ND | 0.1250 | 0.1430 | 0.1430 | ND | 0.0500 | ND | 0.0500 |
| 11/17/2018 | 88 | 4.5 | * | * | * | * | * | * | * | * | * | * |
| 11/25/2018 | 316 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.4350 | 0.4350 | 0.4050 | 0.4050 | 0.7780 | 0.7780 |
| 12/1/2018 | 240 | 2.7 | ND | 0.0500 | ND | 0.1250 | 0.1660 | 0.1660 | ND | 0.0500 | ND | 0.0500 |
| 12/7/2018 | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.2060 | 0.2060 | ND | 0.0500 | ND | 0.0500 |
| 12/13/2018 | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1180 | 0.1180 | ND | 0.0500 | ND | 0.0500 |
| 12/19/2018 | 15 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.2070 | 0.2070 | 0.3010 | 0.3010 | 0.9900 | 0.9900 |
| 12/25/2018 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1430 | 0.1430 | ND | 0.0500 | ND | 0.0500 |
| 12/31/2018 | 254 | 3.2 | ND | 0.0500 | ND | 0.1250 | 0.2350 | 0.2350 | ND | 0.0500 | ND | 0.0500 |

| | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| Year-To-Date Sum | 1.1590 | 3.6090 | 0.0000 | 6.7500 | 12.6900 | 13.0900 | 18.2710 | 19.8210 | 15.7760 | 17.2760 |
| Rolling Year Average | 0.0227 | 0.0708 | 0.0000 | 0.1324 | 0.2488 | 0.2567 | 0.3583 | 0.3886 | 0.3093 | 0.3387 |
| Annual Average | 0.0227 | 0.0708 | 0.0000 | 0.1324 | 0.2488 | 0.2567 | 0.3583 | 0.3886 | 0.3093 | 0.3387 |

Number of theoretical sample periods
Number of non operational sample periods

60
9

60
9

60
9

60
9

60
9

60
9

60
9

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

| TCEQ Air Monitoring Comparison Values (ppb) | | | | Investigation |
|---|---------|------|-------------|---------------|
| Chemical | ST | L.T | Limit (ppb) | |
| Vinyl Chloride | 27,000 | 0.47 | 25 | |
| Ethylene Dichloride | 94 | 0.72 | 29.7 | |
| Benzene | 180 | 1.4 | 28.2 | |
| Ethylene | 500,000 | 30 | 500 | |
| 1, 3 Butadiene | 1,700 | 9 | 25 | |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - PARK SITE
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 01/23/18 | 275 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.4990 | 0.4990 | 0.7540 | 0.7540 | ND | 0.0500 |
| 01/23/18 _d | 275 | 4.0 | ND | 0.5000 | ND | 0.1250 | 0.5020 | 0.5020 | 0.7230 | 0.7230 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -0.5994 | | 4.1977 | | ND | |
| 02/28/18 | 145 | 10.1 | ND | 0.0500 | ND | 0.1250 | 1.0400 | 1.0400 | ND | 0.0500 | 0.1050 | 0.1050 |
| 02/28/18 _d | 145 | 10.1 | ND | 0.0500 | ND | 0.1250 | 1.1200 | 1.1200 | ND | 0.0500 | 0.1440 | 0.1440 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -7.4074 | | ND | | -31.3253 | |
| 07/28/18 | 133 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.2490 | 0.2490 | 0.2380 | 0.2380 | 0.6500 | 0.6500 |
| 07/28/18 _d | 133 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.2500 | 0.2500 | 0.2350 | 0.2350 | 0.6380 | 0.6380 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -0.4008 | | 1.2685 | | 1.8634 | |
| 08/29/18 | 121 | 4.3 | ND | 0.0500 | ND | 0.1250 | 0.1940 | 0.1940 | ND | 0.0500 | 0.1040 | 0.1040 |
| 08/29/18 _d | 121 | 4.3 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1080 | 0.1080 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 118.0328 | | ND | | -3.7736 | |
| 09/18/18 | 187 | 1.3 | ND | 0.0500 | ND | 0.1250 | 0.5080 | 0.5080 | ND | 0.0500 | 0.3570 | 0.3570 |
| 09/18/18 _d | 187 | 1.3 | ND | 0.0500 | ND | 0.1250 | 0.5940 | 0.5940 | ND | 0.0500 | 0.2820 | 0.2820 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -15.6080 | | ND | | 23.4742 | |
| 10/14/18 | 123 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.2730 | 0.2730 | 2.7200 | 2.7200 | 7.3000 | 7.3000 |
| 10/14/18 _d | 123 | 7.0 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 12/07/18 | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.2060 | 0.2060 | ND | 0.0500 | ND | 0.0500 |
| 12/07/18 _d | 102 | 1.9 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |

d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
PC PLANT SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 1/1/2018 | 345 | 8.7 | ND | 0.0500 | ND | 0.1250 | 0.4340 | 0.4340 | 0.1340 | 0.1340 | ND | 0.0500 |
| 1/3/2018 | 289 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.1280 | 0.1280 | ND | 0.0500 | ND | 0.0500 |
| 1/5/2018 | 71 | 5.0 | * | * | * | * | * | * | * | * | * | * |
| 1/7/2018 | 119 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | ND | 0.0500 | ND | 0.0500 |
| 1/9/2018 | 146 | 5.6 | ND | 0.0500 | ND | 0.1250 | 1.1000 | 1.1000 | 0.2570 | 0.2570 | 0.3910 | 0.3910 |
| 1/11/2018 | 202 | 8.9 | ND | 0.0500 | ND | 0.1250 | 0.1960 | 0.1960 | ND | 0.0500 | 0.7240 | 0.7240 |
| 1/13/2018 | 245 | 6.9 | ND | 0.0500 | ND | 0.1250 | 0.9340 | 0.9340 | 1.5400 | 1.5400 | 1.7900 | 1.7900 |
| 1/15/2018 | 89 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1030 | 0.1030 | ND | 0.0500 | 0.1370 | 0.1370 |
| 1/17/2018 | 311 | 4.2 | ND | 0.0500 | ND | 0.1250 | 1.2900 | 1.2900 | 1.0200 | 1.0200 | 0.1850 | 0.1850 |
| 1/19/2018 | 94 | 7.9 | ND | 0.0500 | ND | 0.1250 | 0.5730 | 0.5730 | 2.6500 | 2.6500 | 2.6000 | 2.6000 |
| 1/21/2018 | 126 | 7.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 1/23/2018 | 275 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.6400 | 0.6400 | 0.4360 | 0.4360 | 0.3610 | 0.3610 |
| 1/25/2018 | 114 | 6.3 | 10.5000 | 10.5000 | ND | 0.7500 | 1.2400 | 1.2400 | 3.5900 | 3.5900 | 2.5100 | 2.5100 |
| 1/27/2018 | 121 | 4.4 | 5.4500 | 5.4500 | ND | 0.7500 | 1.5600 | 1.5600 | 1.6800 | 1.6800 | 6.9100 | 6.9100 |
| 1/29/2018 | 341 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.8990 | 0.8990 | 1.0400 | 1.0400 | ND | 0.0500 |
| 1/31/2018 | 131 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.3660 | 0.3660 | ND | 0.0500 | ND | 0.0500 |
| 2/2/2018 | 146 | 8.4 | ND | 0.0500 | ND | 0.1250 | 0.8700 | 0.8700 | 0.6390 | 0.6390 | 0.6030 | 0.6030 |
| 2/4/2018 | 197 | 5.2 | * | * | * | * | * | * | * | * | * | * |
| 2/6/2018 | 102 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.2270 | 0.2270 | 0.2520 | 0.2520 | 1.4000 | 1.4000 |
| 2/8/2018 | 268 | 5.0 | ND | 0.0500 | ND | 0.1250 | 0.9460 | 0.9460 | 1.0600 | 1.0600 | 0.2510 | 0.2510 |
| 2/10/2018 | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 2.0700 | 2.0700 | 0.7500 | 0.7500 | 0.2350 | 0.2350 |
| 2/12/2018 | 248 | 8.7 | ND | 0.1000 | ND | 0.2500 | 0.9700 | 0.9700 | 0.9820 | 0.9820 | ND | 0.0500 |
| 2/14/2018 | 206 | 3.9 | ND | 0.0500 | ND | 0.1250 | 1.6800 | 1.6800 | 1.4900 | 1.4900 | 0.5790 | 0.5790 |
| 2/16/2018 | 147 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.2400 | 0.2400 | 0.1520 | 0.1520 | ND | 0.0500 |
| 2/18/2018 | 118 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.7060 | 0.7060 | 3.4300 | 3.4300 | 1.9200 | 1.9200 |
| 2/20/2018 | 115 | 9.6 | ND | 0.0500 | 0.3320 | 0.3320 | 0.1010 | 0.1010 | ND | 0.0500 | ND | 0.0500 |
| 2/22/2018 | 315 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| 2/24/2018 | 141 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 2/26/2018 | 156 | 8.2 | ND | 0.0500 | ND | 0.1250 | 0.1620 | 0.1620 | ND | 0.0500 | ND | 0.0500 |
| 2/28/2018 | 145 | 10.1 | ND | 0.0500 | ND | 0.1250 | 0.4650 | 0.4650 | ND | 0.0500 | ND | 0.0500 |
| 3/2/2018 | 159 | 8.1 | ND | 0.0500 | ND | 0.1250 | 1.2600 | 1.2600 | 1.5700 | 1.5700 | 1.6000 | 1.6000 |
| 3/4/2018 | 105 | 8.5 | * | * | * | * | * | * | * | * | * | * |
| 3/6/2018 | 211 | 8.3 | ND | 0.0500 | ND | 0.1250 | 0.8900 | 0.8900 | 1.4700 | 1.4700 | 0.6650 | 0.6650 |
| 3/8/2018 | 69 | 7.6 | 0.9900 | 0.9900 | ND | 0.0500 | ND | 0.0500 | 4.6100 | 4.6100 | 2.3000 | 2.3000 |
| 3/10/2018 | 155 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1790 | 0.1790 | ND | 0.0500 | ND | 0.0500 |
| 3/12/2018 | 279 | 7.4 | * | * | * | * | * | * | * | * | * | * |
| 3/14/2018 | 150 | 5.1 | ND | 0.0500 | ND | 0.1250 | 1.0800 | 1.0800 | 4.8300 | 4.8300 | 0.5480 | 0.5480 |
| 3/16/2018 | 152 | 6.8 | ND | 0.0500 | ND | 0.1250 | 0.2110 | 0.2110 | ND | 0.0500 | ND | 0.0500 |
| 3/18/2018 | 125 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.1480 | 0.1480 | ND | 0.0500 | ND | 0.0500 |
| 3/20/2018 | 287 | 6.1 | ND | 0.0500 | ND | 0.1250 | 0.7890 | 0.7890 | 3.5800 | 3.5800 | 0.3810 | 0.3810 |
| 3/22/2018 | 102 | 7.8 | ND | 0.0500 | ND | 0.1250 | 0.3950 | 0.3950 | ND | 0.0500 | ND | 0.0500 |
| 3/24/2018 | 146 | 7.7 | ND | 0.0500 | ND | 0.1250 | 0.1390 | 0.1390 | ND | 0.0500 | ND | 0.0500 |
| 3/26/2018 | 124 | 10.2 | ND | 0.0500 | ND | 0.1250 | 0.1600 | 0.1600 | ND | 0.0500 | ND | 0.0500 |
| 3/28/2018 | 130 | 9.2 | ND | 0.0500 | ND | 0.1250 | 0.1480 | 0.1480 | ND | 0.0500 | ND | 0.0500 |
| 3/30/2018 | 126 | 7.1 | ND | 0.0500 | ND | 0.1250 | 0.2900 | 0.2900 | 0.4610 | 0.4610 | 0.1430 | 0.1430 |
| 4/1/2018 | 126 | 8.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 4/3/2018 | 140 | 7.3 | ND | 0.0500 | ND | 0.1250 | 0.1130 | 0.1130 | ND | 0.0500 | ND | 0.0500 |
| 4/5/2018 | 96 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.1540 | 0.1540 | 1.0500 | 1.0500 | 1.2200 | 1.2200 |
| 4/7/2018 | 331 | 4.7 | ND | 0.0500 | ND | 0.1250 | 0.2520 | 0.2520 | 0.1070 | 0.1070 | ND | 0.0500 |
| 4/9/2018 | 32 | 5.1 | 2.5800 | 2.5800 | ND | 0.1250 | ND | 0.0500 | 4.9200 | 4.9200 | 2.4400 | 2.4400 |
| 4/11/2018 | 114 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.2320 | 0.2320 | 0.2140 | 0.2140 | 0.4920 | 0.4920 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
PC PLANT SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 4/13/2018 | 142 | 10.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 4/15/2018 | 305 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.3520 | 0.1640 | ND | 0.1640 | ND | 0.0500 |
| 4/17/2018 | 144 | 9.7 | ND | 0.5000 | ND | 0.1250 | 0.1650 | 0.1650 | ND | 0.0500 | ND | 0.0500 |
| 4/19/2018 | 48 | 3.3 | ND | 0.0500 | ND | 0.1250 | 0.6060 | 0.6060 | 0.4210 | 0.4210 | 0.1940 | 0.1940 |
| 4/21/2018 | 108 | 6.4 | ND | 0.0500 | ND | 0.1250 | 0.1840 | 0.1840 | ND | 0.0500 | ND | 0.0500 |
| 4/23/2018 | 243 | 1.2 | ND | 0.0500 | ND | 0.1250 | 0.2550 | 2.1000 | 2.1000 | 2.1000 | 0.3550 | 0.3550 |
| 4/25/2018 | 124 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.3300 | 0.3300 | 0.1980 | 0.1980 | 0.1260 | 0.1260 |
| 4/27/2018 | 336 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5380 | 2.2300 | 2.2300 | 2.2300 | 0.2050 | 0.2050 |
| 4/29/2018 | 106 | 5.5 | * | * | * | * | * | * | * | * | * | * |
| 5/1/2018 | 113 | 9.8 | ND | 0.0500 | ND | 0.1250 | 0.1050 | 0.1050 | ND | 0.0500 | ND | 0.0500 |
| 5/3/2018 | 125 | 9.9 | ND | 0.0500 | ND | 0.1250 | 0.1230 | 0.1230 | ND | 0.0500 | ND | 0.0500 |
| 5/5/2018 | 320 | 3.5 | ND | 0.0500 | ND | 0.1250 | 0.2280 | 0.2280 | ND | 0.0500 | ND | 0.0500 |
| 5/7/2018 | 166 | 2.7 | ND | 0.0500 | ND | 0.1250 | 0.1160 | 0.1160 | ND | 0.0500 | ND | 0.0500 |
| 5/9/2018 | 126 | 6.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 5/11/2018 | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 5/13/2018 | 115 | 7.9 | * | * | * | * | * | * | * | * | * | * |
| 5/15/2018 | 125 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 5/17/2018 | 159 | 6.0 | ND | 0.0500 | ND | 0.1250 | 0.1320 | 0.1320 | ND | 0.0500 | ND | 0.0500 |
| 5/19/2018 | 121 | 10.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 5/21/2018 | 117 | 3.9 | ND | 0.0500 | ND | 0.1250 | 0.1520 | 0.1520 | 0.3580 | 0.3580 | 0.8050 | 0.8050 |
| 5/23/2018 | 96 | 5.2 | * | * | * | * | * | * | * | * | * | * |
| 5/25/2018 | 149 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.1160 | 0.1160 | ND | 0.0500 | ND | 0.0500 |
| 5/27/2018 | 146 | 4.9 | * | * | * | * | * | * | * | * | * | * |
| 5/29/2018 | 144 | 5.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1290 | 0.1290 |
| 5/31/2018 | 128 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/2/2018 | 148 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1020 | 0.1020 | ND | 0.0500 | 0.1390 | 0.1390 |
| 6/4/2018 | 169 | 4.4 | ND | 0.0500 | ND | 0.1250 | 0.1170 | 0.1170 | 0.1750 | 0.1750 | 0.1230 | 0.1230 |
| 6/6/2018 | 137 | 6.7 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/8/2018 | 121 | 7.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/10/2018 | 140 | 8.8 | ND | 0.0500 | ND | 0.1250 | 0.1930 | 0.1930 | ND | 0.0500 | ND | 0.0500 |
| 6/12/2018 | 126 | 8.8 | ND | 0.0500 | ND | 0.1250 | 0.1120 | 0.1120 | ND | 0.0500 | ND | 0.0500 |
| 6/14/2018 | 122 | 6.9 | ND | 0.0500 | ND | 0.1250 | 0.1490 | 0.1490 | ND | 0.0500 | ND | 0.0500 |
| 6/16/2018 | 114 | 8.9 | * | * | * | * | * | * | * | * | * | * |
| 6/18/2018 | 99 | 4.8 | ND | 0.0500 | ND | 0.1250 | 0.1120 | 0.1120 | 0.6960 | 0.6960 | 1.8400 | 1.8400 |
| 6/20/2018 | 105 | 5.3 | ND | 0.0500 | ND | 0.1250 | 0.1230 | 0.1230 | 0.3960 | 0.3960 | 0.6200 | 0.6200 |
| 6/22/2018 | 151 | 4.9 | ND | 0.0500 | ND | 0.1250 | 0.1560 | 0.1560 | ND | 0.0500 | 0.1030 | 0.1030 |
| 6/24/2018 | 131 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/26/2018 | 123 | 7.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/28/2018 | 143 | 7.0 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 6/30/2018 | 137 | 8.3 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 7/2/2018 | 140 | 5.3 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 7/4/2018 | 130 | 2.8 | ND | 0.0500 | ND | 1.2500 | ND | 0.5000 | ND | 0.5000 | 10.3000 | 10.3000 |
| 7/6/2018 | 208 | 0.7 | ND | 0.0500 | ND | 0.1250 | 0.3180 | 0.3180 | 0.1040 | 0.1040 | 0.3430 | 0.3430 |
| 7/8/2018 | 161 | 2.8 | ND | 0.0500 | ND | 0.1250 | 0.1930 | 0.1930 | ND | 0.0500 | ND | 0.0500 |
| 7/10/2018 | 121 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.3650 | 0.3650 | ND | 0.0500 | ND | 0.0500 |
| 7/12/2018 | 146 | 4.3 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 7/14/2018 | 138 | 6.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 7/16/2018 | 153 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | ND | 0.0500 | ND | 0.0500 |
| 7/18/2018 | 164 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.1850 | 0.1850 | ND | 0.0500 | ND | 0.0500 |
| 7/20/2018 | 163 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.4950 | 0.4950 | ND | 0.0500 | 0.1720 | 0.1720 |
| 7/22/2018 | 176 | 5.7 | ND | 0.0500 | ND | 0.1250 | 0.4890 | 0.4890 | ND | 0.0500 | 0.1090 | 0.1090 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
PC PLANT SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 7/24/2018 | 145 | 3.7 | ND | 0.0500 | ND | 0.1390 | 0.1390 | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 7/26/2018 | 143 | 3.1 | ND | 0.0500 | ND | 0.1250 | 0.2550 | 0.0500 | ND | 0.0500 | 0.1000 | 0.1000 |
| 7/28/2018 | 133 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.1870 | 0.0500 | ND | 0.0500 | 0.1050 | 0.1050 |
| 7/30/2018 | 156 | 3.9 | ND | 0.0500 | ND | 0.1250 | 0.0500 | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/1/2018 | 129 | 1.1 | ND | 0.0500 | ND | 0.1250 | 0.3900 | 0.3900 | 1.2300 | 1.2300 | 0.3580 | 0.3580 |
| 8/3/2018 | 107 | 4.1 | ND | 0.0500 | ND | 0.1250 | 0.3420 | 0.3420 | 0.7380 | 0.7380 | 1.2800 | 1.2800 |
| 8/5/2018 | 101 | 6.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/7/2018 | 122 | 6.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/9/2018 | 138 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1170 | 0.1170 |
| 8/11/2018 | 149 | 4.1 | * | * | * | * | * | * | * | * | * | * |
| 8/13/2018 | 134 | 7.7 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/15/2018 | 142 | 6.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/17/2018 | 135 | 6.0 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/19/2018 | 158 | 7.4 | * | * | * | * | * | * | * | * | * | * |
| 8/21/2018 | 155 | 5.4 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/23/2018 | 136 | 3.9 | * | * | * | * | * | * | * | * | * | * |
| 8/25/2018 | 125 | 5.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/27/2018 | 124 | 6.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 8/29/2018 | 121 | 4.3 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | 0.1120 | 0.1120 |
| 8/31/2018 | 106 | 4.0 | * | * | * | * | * | * | * | * | * | * |
| 9/2/2018 | 106 | 2.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | 0.1700 | 0.1700 | 0.3080 | 0.3080 |
| 9/4/2018 | 69 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.1090 | 0.1090 | 1.6600 | 1.6600 | 1.9400 | 1.9400 |
| 9/6/2018 | 91 | 1.8 | ND | 0.0500 | ND | 0.1250 | 0.1680 | 0.1680 | 0.6980 | 0.6980 | 0.6670 | 0.6670 |
| 9/8/2018 | 120 | 4.8 | ND | 0.0500 | ND | 0.1250 | 0.1760 | 0.1760 | 0.1070 | 0.1070 | 0.1150 | 0.1150 |
| 9/10/2018 | 40 | 3.7 | ND | 0.0500 | ND | 0.1250 | 0.1080 | 0.1080 | 1.5300 | 1.5300 | 3.5800 | 3.5800 |
| 9/12/2018 | 60 | 4.6 | ND | 0.0500 | ND | 0.1250 | 0.1600 | 0.1600 | 2.0500 | 2.0500 | 3.3800 | 3.3800 |
| 9/14/2018 | 41 | 6.1 | ND | 0.0500 | ND | 0.1250 | 0.1550 | 0.1550 | 2.1800 | 2.1800 | 5.1700 | 5.1700 |
| 9/16/2018 | 122 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.2860 | 0.2860 | 0.5470 | 0.5470 | 0.8670 | 0.8670 |
| 9/18/2018 | 187 | 1.3 | ND | 0.0500 | ND | 0.1250 | 0.1320 | 0.1320 | ND | 0.0500 | 0.1420 | 0.1420 |
| 9/20/2018 | 121 | 5.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 9/22/2018 | 204 | 2.9 | ND | 0.0500 | ND | 0.1250 | 0.1510 | 0.1510 | ND | 0.0500 | ND | 0.0500 |
| 9/24/2018 | 115 | 4.5 | ND | 0.0500 | ND | 0.1250 | 0.1780 | 0.1780 | ND | 0.0500 | ND | 0.0500 |
| 9/26/2018 | 132 | 2.4 | ND | 0.0500 | ND | 0.1250 | 0.1510 | 0.1510 | 0.4270 | 0.4270 | 0.8060 | 0.8060 |
| 9/28/2018 | 62 | 2.9 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | 1.6100 | 1.6100 | 1.9400 | 1.9400 |
| 9/30/2018 | 65 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.2190 | 0.2190 | 2.1300 | 2.1300 | 2.8200 | 2.8200 |
| 10/2/2018 | 92 | 4.7 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | 1.2900 | 1.2900 | 2.1200 | 2.1200 |
| 10/4/2018 | 111 | 4.8 | ND | 0.0500 | ND | 1.2500 | 1.0900 | 1.0900 | ND | 0.5000 | ND | 0.5000 |
| 10/6/2018 | 112 | 6.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 10/8/2018 | 108 | 7.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 10/10/2018 | 344 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.7510 | 0.7510 | 0.9960 | 0.9960 | 0.9980 | 0.9980 |
| 10/12/2018 | 88 | 5.1 | ND | 0.0500 | ND | 0.1250 | 0.4150 | 0.4150 | 5.0600 | 5.0600 | 17.7000 | 17.7000 |
| 10/14/2018 | 123 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.2210 | 0.2210 | ND | 0.0500 | ND | 0.0500 |
| 10/16/2018 | 317 | 6.3 | ND | 0.0500 | ND | 0.1250 | 0.2080 | 0.2080 | ND | 0.0500 | ND | 0.0500 |
| 10/18/2018 | 343 | 4.9 | ND | 0.0500 | ND | 0.1250 | 0.6560 | 0.6560 | 1.0100 | 1.0100 | ND | 0.0500 |
| 10/20/2018 | 345 | 6.8 | ND | 0.0500 | ND | 0.1250 | 0.3600 | 0.3600 | 1.2300 | 1.2300 | ND | 0.0500 |
| 10/22/2018 | 351 | 4.8 | ND | 0.0500 | ND | 0.1250 | 0.3050 | 0.3050 | 4.7800 | 4.7800 | 0.1290 | 0.1290 |
| 10/24/2018 | 5 | 3.9 | * | * | * | * | * | * | * | * | * | * |
| 10/26/2018 | 249 | 1.5 | ND | 0.0500 | ND | 0.1250 | 0.2520 | 0.2520 | 0.6970 | 0.6970 | ND | 0.0500 |
| 10/28/2018 | 179 | 2.8 | ND | 0.0500 | ND | 0.1250 | 0.2960 | 0.2960 | ND | 0.0500 | ND | 0.0500 |
| 10/30/2018 | 137 | 6.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 11/1/2018 | 324 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.2610 | 0.2610 | 1.0300 | 1.0300 | ND | 0.0500 |

FORMOSA VOC CANISTER ANALYSIS

4th QUARTER 2018

PC PLANT SITE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 11/3/2018 | 136 | 6.7 | 0.3310 | 0.3310 | ND | 0.1250 | 0.1010 | 0.1010 | ND | 0.0500 | ND | 0.0500 |
| 11/5/2018 | 158 | 4.9 | 0.3430 | 0.3430 | ND | 0.1250 | 0.1660 | 0.1660 | 0.4450 | 0.4450 | 0.7320 | 0.7320 |
| 11/7/2018 | 157 | 4.8 | 0.3760 | 0.3760 | ND | 0.1250 | 0.1450 | 0.1450 | ND | 0.0500 | ND | 0.0500 |
| 11/9/2018 | 348 | 10.2 | ND | 0.0500 | 0.2930 | 0.2930 | 0.4330 | 0.4330 | 1.3200 | 1.3200 | 0.3510 | 0.3510 |
| 11/11/2018 | 24 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.2450 | 0.2450 | 0.8340 | 0.8340 | 0.3180 | 0.3180 |
| 11/13/2018 | 321 | 7.6 | ND | 0.0500 | ND | 0.1250 | 0.3090 | 0.3090 | 0.7050 | 0.7050 | ND | 0.0500 |
| 11/15/2018 | 112 | 2.9 | ND | 0.0500 | ND | 0.1250 | * | * | * | * | 0.8120 | 0.8120 |
| 11/17/2018 | 88 | 4.5 | * | * | * | * | * | * | * | * | * | * |
| 11/19/2018 | 344 | 7.0 | ND | 0.0500 | ND | 0.1250 | 0.4500 | 0.4500 | 1.3400 | 1.3400 | 1.0700 | 1.0700 |
| 11/21/2018 | 22 | 4.8 | ND | 0.0500 | ND | 0.1250 | 0.2050 | 0.2050 | ND | 0.0500 | ND | 0.0500 |
| 11/23/2018 | 46 | 0.4 | ND | 0.0500 | ND | 0.1250 | 0.1770 | 0.1770 | ND | 0.0500 | ND | 0.0500 |
| 11/25/2018 | 316 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.1930 | 0.1930 | ND | 0.0500 | ND | 0.0500 |
| 11/27/2018 | 85 | 1.9 | ND | 0.0500 | 0.2780 | 0.2780 | 0.8490 | 0.8490 | 0.6290 | 0.6290 | 0.6660 | 0.6660 |
| 11/29/2018 | 145 | 3.2 | ND | 0.0500 | ND | 0.1250 | 0.3790 | 0.3790 | 1.8800 | 1.8800 | 5.1400 | 5.1400 |
| 12/1/2018 | 240 | 2.7 | ND | 0.0500 | 0.2780 | 0.2780 | 0.3240 | 0.3240 | 0.1260 | 0.1260 | 0.2680 | 0.2680 |
| 12/3/2018 | 348 | 5.8 | ND | 0.0500 | ND | 0.1250 | * | * | * | * | * | * |
| 12/5/2018 | 46 | 5.0 | ND | 0.0500 | ND | 0.1250 | 0.2460 | 0.2460 | 0.1050 | 0.1050 | 0.3330 | 0.3330 |
| 12/7/2018 | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.1550 | 0.1550 | ND | 0.0500 | ND | 0.0500 |
| 12/9/2018 | 323 | 6.4 | ND | 0.0500 | ND | 0.1250 | * | * | * | * | * | * |
| 12/11/2018 | 101 | 3.0 | ND | 0.0500 | ND | 0.1250 | 0.5460 | 0.5460 | ND | 0.0500 | 0.2160 | 0.2160 |
| 12/13/2018 | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.2210 | 0.2210 | 0.5950 | 0.5950 | 3.3900 | 3.3900 |
| 12/15/2018 | 284 | 5.4 | ND | 0.0500 | ND | 0.1250 | 0.2790 | 0.2790 | ND | 0.0500 | 0.2230 | 0.2230 |
| 12/17/2018 | 129 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.7380 | 0.7380 | 0.4220 | 0.4220 | ND | 0.0500 |
| 12/19/2018 | 15 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.2070 | 0.2070 | 0.1530 | 0.1530 | 0.8980 | 0.8980 |
| 12/21/2018 | 240 | 3.0 | ND | 0.0500 | 0.2910 | 0.2910 | 0.2390 | 0.2390 | 0.3100 | 0.3100 | 1.5000 | 1.5000 |
| 12/23/2018 | 323 | 3.2 | ND | 0.0500 | ND | 0.1250 | 0.2920 | 0.2920 | 0.3400 | 0.3400 | ND | 0.0500 |
| 12/25/2018 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.3300 | 0.3300 | ND | 0.0500 | ND | 0.0500 |
| 12/27/2018 | 128 | 1.7 | ND | 0.0500 | ND | 0.1250 | 0.3300 | 0.3300 | ND | 0.0500 | ND | 0.0500 |
| 12/29/2018 | 346 | 8.6 | ND | 0.0500 | ND | 0.1250 | 0.3300 | 0.3300 | ND | 0.0500 | ND | 0.0500 |
| 12/31/2018 | 254 | 3.2 | 0.7080 | 0.7080 | ND | 0.1250 | 0.3300 | 0.3300 | ND | 0.0500 | ND | 0.0500 |

| | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| Year-To-Date Sum | 21.2780 | 31.7780 | 1.4720 | 24.8470 | 47.4090 | 49.8590 | 91.2340 | 96.6340 | 107.0660 | 111.3660 |
| Rolling Year Average | 0.1305 | 0.1950 | 0.0090 | 0.1524 | 0.2909 | 0.3059 | 0.5597 | 0.5928 | 0.6568 | 0.6832 |
| Annual Average | 0.1305 | 0.1950 | 0.0090 | 0.1524 | 0.2909 | 0.3059 | 0.5597 | 0.5928 | 0.6568 | 0.6832 |

Number of theoretical sample periods
Number of non operational sample periods

183
20

183
20

183
20

183
20

183
20

183
20

183
20

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

163.0000

| TCEQ Air Monitoring Comparison Values (ppb) | | | Investigation Limit (ppb) |
|---|---------|------|---------------------------|
| Chemical | ST | LT | |
| Vinyl Chloride | 27,000 | 0.47 | 25 |
| Ethylene Dichloride | 94 | 0.72 | 29.7 |
| Benzene | 180 | 1.4 | 28.2 |
| Ethylene | 500,000 | 30 | 500 |
| 1, 3 Butadiene | 1,700 | 9 | 25 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - PC SITE
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 01/09/18 | 146 | 5.6 | ND | 0.0500 | ND | 0.1250 | 1.1000 | 1.1000 | 0.2570 | 0.2570 | 0.3910 | 0.3910 |
| 01/09/18 _a | 146 | 5.6 | ND | 0.0500 | ND | 0.1250 | 1.2000 | 1.2000 | 0.2780 | 0.2780 | 0.6330 | 0.6330 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -8.6957 | | -7.8505 | | -47.2656 | |
| 01/15/18 | 89 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.1030 | 0.1030 | ND | 0.0500 | 0.1370 | 0.1370 |
| 01/15/18 _a | 89 | 5.9 | * | * | ND | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 01/23/18 | 275 | 4.0 | ND | 0.0500 | ND | 0.1250 | 0.6400 | 0.6400 | 0.4360 | 0.4360 | 0.3610 | 0.3610 |
| 01/23/18 _a | 275 | 4.0 | ND | 0.5000 | ND | 0.1250 | 0.6770 | 0.6770 | 0.9880 | 0.9880 | 0.3680 | 0.3680 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -5.6188 | | -77.5281 | | -1.9204 | |
| 01/27/18 | 121 | 4.4 | 5.4500 | 5.4500 | ND | 0.7500 | 1.5600 | 1.5600 | 1.6800 | 1.6800 | 6.9100 | 6.9100 |
| 01/27/18 _a | 121 | 4.4 | 3.5900 | 3.5900 | ND | 0.7500 | 0.7840 | 0.7840 | 0.9780 | 0.9780 | 4.5200 | 4.5200 |
| Relative Percent Difference (RPD) | | | 41.1504 | | ND | | 66.2116 | | 52.8217 | | 41.8198 | |
| 02/02/18 | 146 | 8.4 | ND | 0.0500 | ND | 0.1250 | 0.8700 | 0.8700 | 0.6390 | 0.6390 | 0.6030 | 0.6030 |
| 02/02/18 _a | 146 | 8.4 | ND | 0.0500 | ND | 0.1250 | 1.2200 | 1.2200 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -33.4928 | | 170.9724 | | 169.3721 | |
| 02/10/18 | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 2.0700 | 2.0700 | 0.7500 | 0.7500 | 0.2350 | 0.2350 |
| 02/10/18 _a | 218 | 3.8 | ND | 0.0500 | ND | 0.1250 | 1.4800 | 1.4800 | 0.7450 | 0.7450 | 0.1480 | 0.1480 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 33.2394 | | 0.6689 | | 45.4308 | |
| 02/14/18 | 206 | 3.9 | ND | 0.0500 | ND | 0.1250 | 1.6800 | 1.6800 | 1.4900 | 1.4900 | 0.5790 | 0.5790 |
| 02/14/18 _a | 206 | 3.9 | * | * | ND | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 02/24/18 | 141 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 02/24/18 _a | 141 | 8.8 | ND | 0.0500 | ND | 0.1250 | 0.9610 | 0.9610 | 1.5000 | 1.5000 | 0.4750 | 0.4750 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -180.2176 | | -187.0968 | | -161.9048 | |
| 03/04/18 | 105 | 8.5 | * | * | * | * | * | * | * | * | * | * |
| 03/04/18 _a | 105 | 8.5 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 03/10/18 | 155 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1790 | 0.1790 | ND | 0.0500 | ND | 0.0500 |
| 03/10/18 _a | 155 | 6.7 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | * | | * | | * | | * | | * | |
| 03/16/18 | 152 | 6.8 | ND | 0.0500 | ND | 0.1250 | 0.2110 | 0.2110 | ND | 0.0500 | ND | 0.0500 |
| 03/16/18 _a | 152 | 6.8 | ND | 0.0500 | ND | 0.1250 | 0.1620 | 0.1620 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 26.2735 | | ND | | ND | |
| 03/22/18 | 102 | 7.8 | ND | 0.0500 | ND | 0.1250 | 0.3950 | 0.3950 | ND | 0.0500 | ND | 0.0500 |
| 03/22/18 _a | 102 | 7.8 | ND | 0.0500 | ND | 0.1250 | 0.3660 | 0.3660 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | 7.6216 | | ND | | ND | |
| 04/03/18 | 140 | 7.3 | ND | 0.0500 | ND | 0.1250 | 0.1130 | 0.1130 | ND | 0.0500 | ND | 0.0500 |
| 04/03/18 _a | 140 | 7.3 | ND | 0.0500 | ND | 0.1250 | 0.1650 | 0.1650 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | ND | | -37.4101 | | ND | | ND | |
| 04/09/18 | 32 | 5.1 | 2.5800 | 2.5800 | ND | 0.1250 | ND | 0.0500 | 4.9200 | 4.9200 | 2.4400 | 2.4400 |
| 04/09/18 _a | 32 | 5.1 | * | * | ND | * | * | * | * | * | * | * |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - PC SITE
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 04/17/18 | 144 | 9.7 | ND | 0.5000 | ND | 0.1250 | 0.1650 | 0.1650 | ND | 0.0500 | ND | 0.0500 |
| 04/17/18 _g | 144 | 9.7 | ND | 0.5000 | ND | 0.1250 | 0.1180 | 0.1180 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 04/21/18 | 108 | 6.4 | ND | 0.0500 | ND | 0.1250 | 0.1840 | 0.1840 | ND | 0.0500 | ND | 0.0500 |
| 04/21/18 _g | 108 | 6.4 | ND | 0.0500 | ND | 0.1250 | 0.1880 | 0.1880 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 04/27/18 | 336 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5380 | 0.5380 | 2.2300 | 2.2300 | 0.2050 | 0.2050 |
| 04/27/18 _g | 336 | 2.2 | ND | 0.0500 | ND | 0.1250 | 0.5740 | 0.5740 | 2.8200 | 2.8200 | 0.1990 | 0.1990 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 05/03/18 | 125 | 9.9 | ND | 0.0500 | ND | 0.1250 | 0.1230 | 0.1230 | ND | 0.0500 | ND | 0.0500 |
| 05/03/18 _g | 125 | 9.9 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 05/11/18 | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 05/11/18 _g | 122 | 9.1 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 05/15/18 | 125 | 5.6 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 05/15/18 _g | 125 | 5.6 | ND | 0.0500 | ND | 0.1250 | 0.1410 | 0.1410 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 05/31/18 | 128 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 05/31/18 _g | 128 | 8.8 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 06/08/18 | 121 | 7.2 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 06/08/18 _g | 121 | 7.2 | ND | 0.0500 | ND | 0.1250 | 0.1370 | 0.1370 | ND | 0.0500 | ND | 2.0000 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 06/14/18 | 122 | 6.9 | ND | 0.0500 | ND | 0.1250 | 0.1490 | 0.1490 | ND | 0.0500 | ND | 0.0500 |
| 06/14/18 _g | 122 | 6.9 | ND | 0.0500 | ND | 0.1250 | 0.1860 | 0.1860 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 06/20/18 | 105 | 5.3 | ND | 0.0500 | ND | 0.1250 | 0.1230 | 0.1230 | 0.3960 | 0.3960 | 0.6200 | 0.6200 |
| 06/20/18 _g | 105 | 5.3 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 06/26/18 | 123 | 7.5 | ND | 0.0500 | ND | 0.1250 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| 06/26/18 _g | 123 | 7.5 | ND | 0.1000 | ND | 0.2500 | ND | 0.1000 | ND | 0.1000 | ND | 0.1000 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 10/04/18 | 111 | 4.8 | ND | 0.5000 | ND | 1.2500 | 1.0900 | 1.0900 | ND | 0.5000 | ND | 0.0500 |
| 10/04/18 _g | 111 | 4.8 | ND | 0.5000 | ND | 1.2500 | 0.1110 | 0.1110 | ND | 0.5000 | ND | 9.4900 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 10/10/18 | 344 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.7510 | 0.7510 | 0.9960 | 0.9960 | 0.9980 | 0.9980 |
| 10/10/18 _g | 344 | 3.8 | ND | 0.0500 | ND | 0.1250 | 0.8850 | 0.8850 | 0.9630 | 0.9630 | 0.9330 | 0.9330 |
| Relative Percent Difference (RPD) | | | | | | | | | | | | |
| 10/16/18 | 317 | 6.3 | ND | 0.0500 | ND | 0.1250 | 0.2080 | 0.2080 | ND | 0.0500 | ND | 0.0500 |

FORMOSA VOC CANISTER ANALYSIS
4th QUARTER 2018
POINT COMFORT - PC SITE
DUPLICATE SAMPLE SCHEDULE

| SAMPLE DATE | AVG. WIND DIRECTION (Degrees) | AVG. WIND SPEED (mph) | ETHYLENE | | 1,3 BUTADIENE | | BENZENE | | VINYL CHLORIDE | | ETHYLENE DICHLORIDE | |
|-----------------------------------|-------------------------------|-----------------------|--------------|------------------------|---------------|------------------------|--------------|------------------------|----------------|------------------------|---------------------|------------------------|
| | | | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) | Actual (ppb) | 1/2 Reported LOD (ppb) |
| 10/16/18 _a | 317 | 6.3 | ND | 0.5000 | ND | 0.1250 | 0.2710 | 0.2710 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 10/22/18 | 351 | 4.8 | ND | 0.0500 | ND | 0.1250 | 0.3050 | 0.3050 | 4.7800 | 4.7800 | 0.1290 | 0.1290 |
| 10/22/18 _a | 351 | 4.8 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 10/28/18 | 179 | 2.8 | ND | 0.0500 | ND | 0.1250 | 0.2960 | 0.2960 | ND | 0.0500 | ND | 0.0500 |
| 10/28/18 _a | 179 | 2.8 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 11/03/18 | 136 | 6.7 | 0.3310 | 0.3310 | ND | 0.1250 | 0.1010 | 0.1010 | ND | 0.0500 | ND | 0.0500 |
| 11/03/18 _a | 136 | 6.7 | 0.3360 | 0.3360 | 0.4800 | 0.4800 | ND | 0.0500 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | -1.4993 | | | | | | | | | |
| 11/11/18 | 24 | 6.2 | ND | 0.0500 | ND | 0.1250 | 0.4330 | 0.4330 | 0.8340 | 0.8340 | 0.3180 | 0.3180 |
| 11/11/18 _a | 24 | 6.2 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 11/17/18 | 88 | 4.5 | * | * | * | * | * | * | * | * | * | * |
| 11/17/18 _a | 88 | 4.5 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 11/23/18 | 46 | 0.4 | * | * | * | * | * | * | * | * | * | * |
| 11/23/18 _a | 46 | 0.4 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 11/29/18 | 145 | 3.2 | ND | 0.0500 | 0.2780 | 0.2780 | 0.1770 | 0.1770 | ND | 0.0500 | 0.3070 | 0.3070 |
| 11/29/18 _a | 145 | 3.2 | ND | 0.0500 | 0.2940 | 0.2940 | 0.2170 | 0.2170 | ND | 0.0500 | 0.3340 | 0.3340 |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 12/07/18 | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.3240 | 0.3240 | 0.1260 | 0.1260 | 0.2680 | 0.2680 |
| 12/07/18 _a | 102 | 1.9 | ND | 0.0500 | ND | 0.1250 | 0.2100 | 0.2100 | 0.6580 | 0.6580 | 0.6510 | 0.6510 |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 12/13/18 | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1550 | 0.1550 | ND | 0.0500 | ND | 0.0500 |
| 12/13/18 _a | 235 | 6.7 | ND | 0.0500 | ND | 0.1250 | 0.1760 | 0.1760 | ND | 0.0500 | ND | 0.0500 |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 12/25/18 | 106 | 5.9 | ND | 0.0500 | ND | 0.1250 | 0.2070 | 0.2070 | 0.1530 | 0.1530 | 0.8980 | 0.8980 |
| 12/25/18 _a | 106 | 5.9 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |
| 12/31/18 | 254 | 3.2 | 0.7080 | 0.7080 | ND | 0.1250 | 0.3200 | 0.3200 | ND | 0.0500 | ND | 0.0500 |
| 12/31/18 _a | 254 | 3.2 | * | * | * | * | * | * | * | * | * | * |
| Relative Percent Difference (RPD) | | | ND | | | | | | | | | |

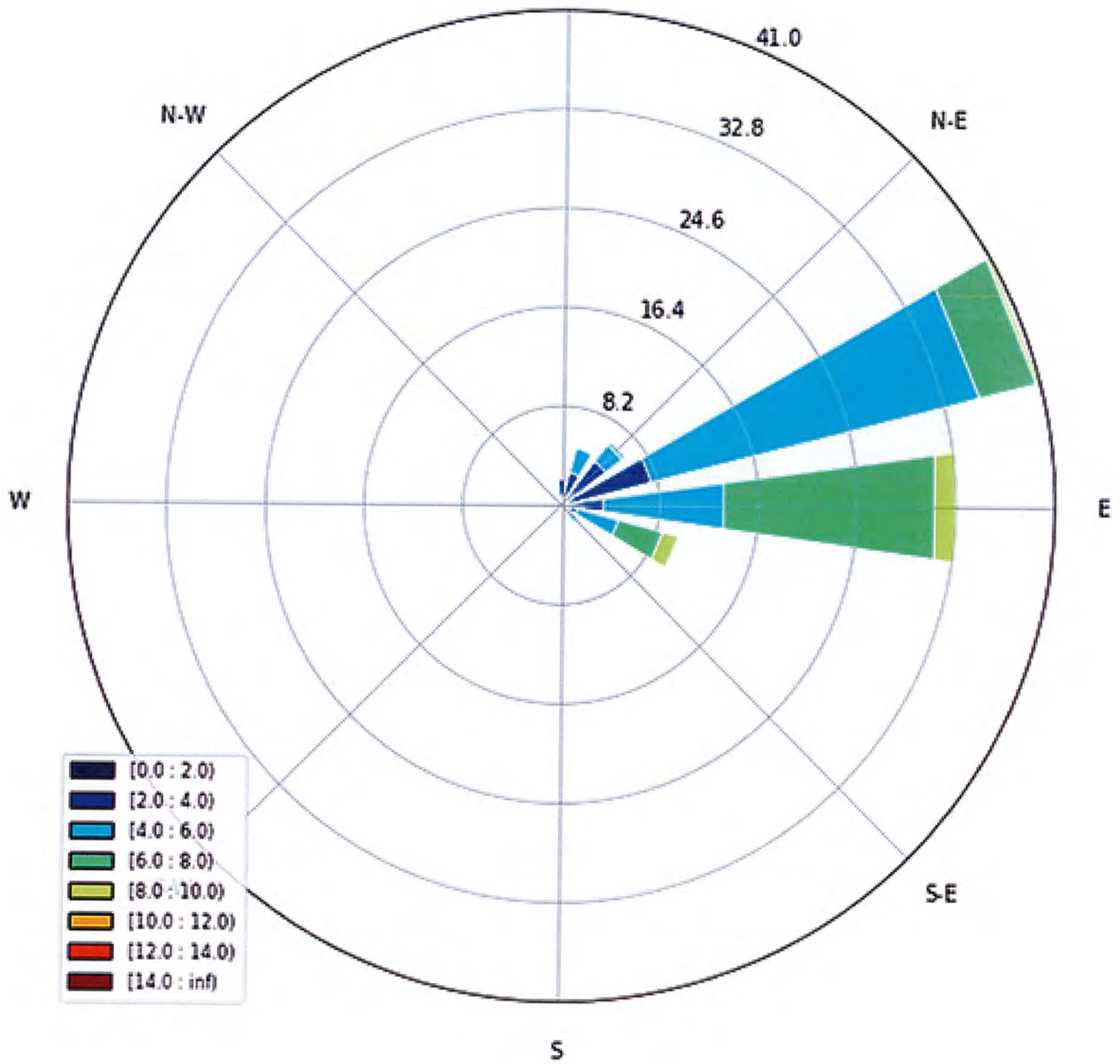
d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

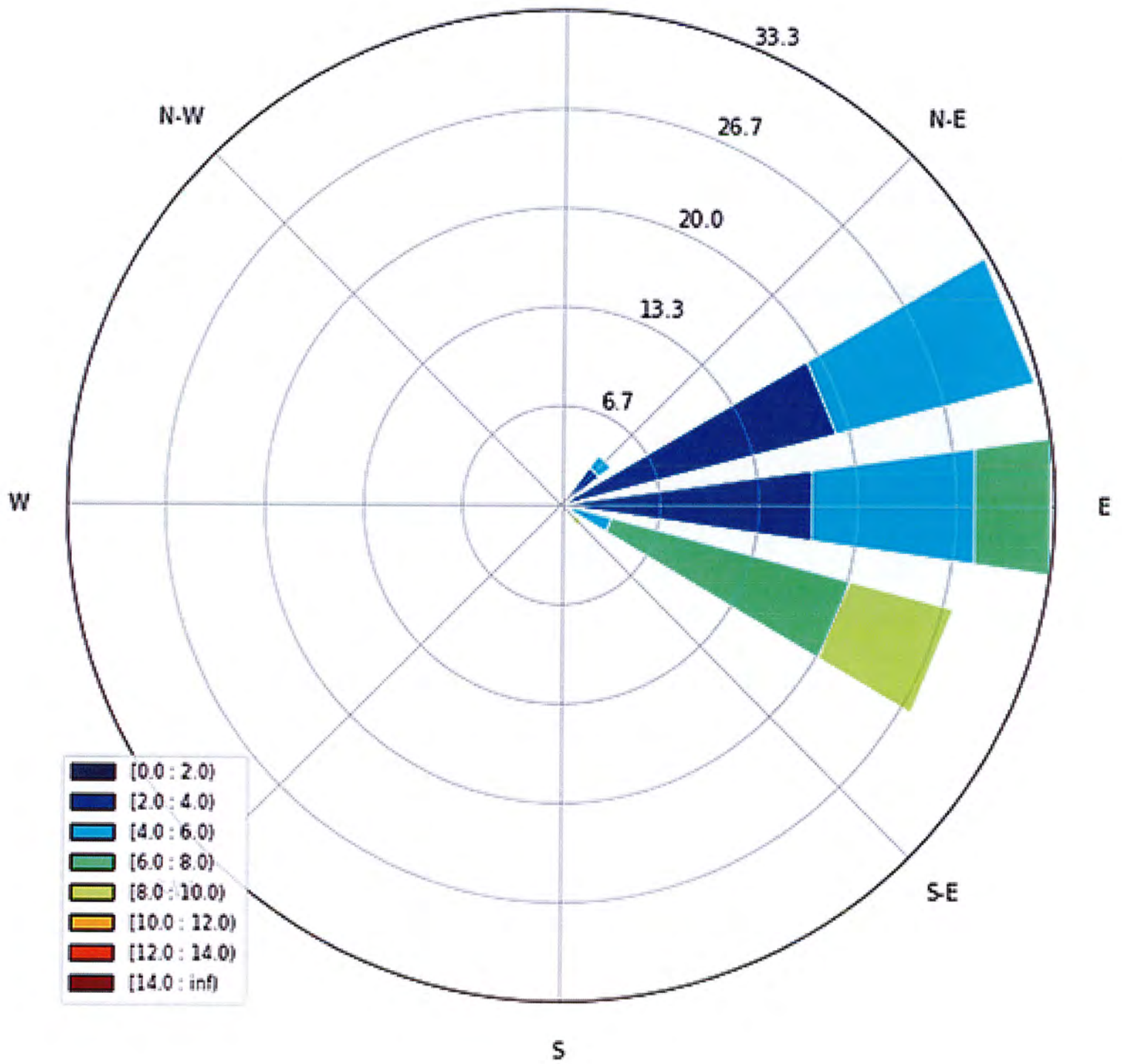
**Summary of Non-operational Periods
4th QUARTER 2018
Point Comfort SUMMA Canister System**

| SUMMA Site | Date (s) | Description of Problem | Corrective Action |
|---|----------|---|--|
| City Hall & Formosa Training Complex | 10/6/18 | Samples did not run due unknown reasons. | AECOM was unable to verify the cause. Next run was successful. |
| PC | 10/24/18 | Voided sample due to low pressure. | Adjusted flow controller to decrease amount sampled. |
| Formosa Training Complex | 10/26/18 | Sample leaked below 25" prior to run. | |
| City Hall, Formosa Training Complex, & Park | 11/1/18 | No SUMMA cans available. | More cans are in the process of being ordered. |
| PC, City Hall & Park | 11/17/18 | Sample did not run due to connectivity issues | Cycled power supply. Connectivity was restored. |
| PC | 11/23/18 | No SUMMA cans available. | More cans are in the process of being ordered. |
| Formosa Training Complex | 12/7/18 | Voided sample due to low pressure. | Adjusted flow controller to decrease amount sampled. |
| PC | 12/9/18 | Voided sample due to low pressure. | Adjusted flow controller to decrease amount sampled. |
| Formosa Training Complex | 12/15/18 | Sample leaked below 25" prior to run. | |
| City Hall, Formosa Training Complex, & Park | 12/25/18 | No SUMMA cans available. | More cans are in the process of being ordered. |

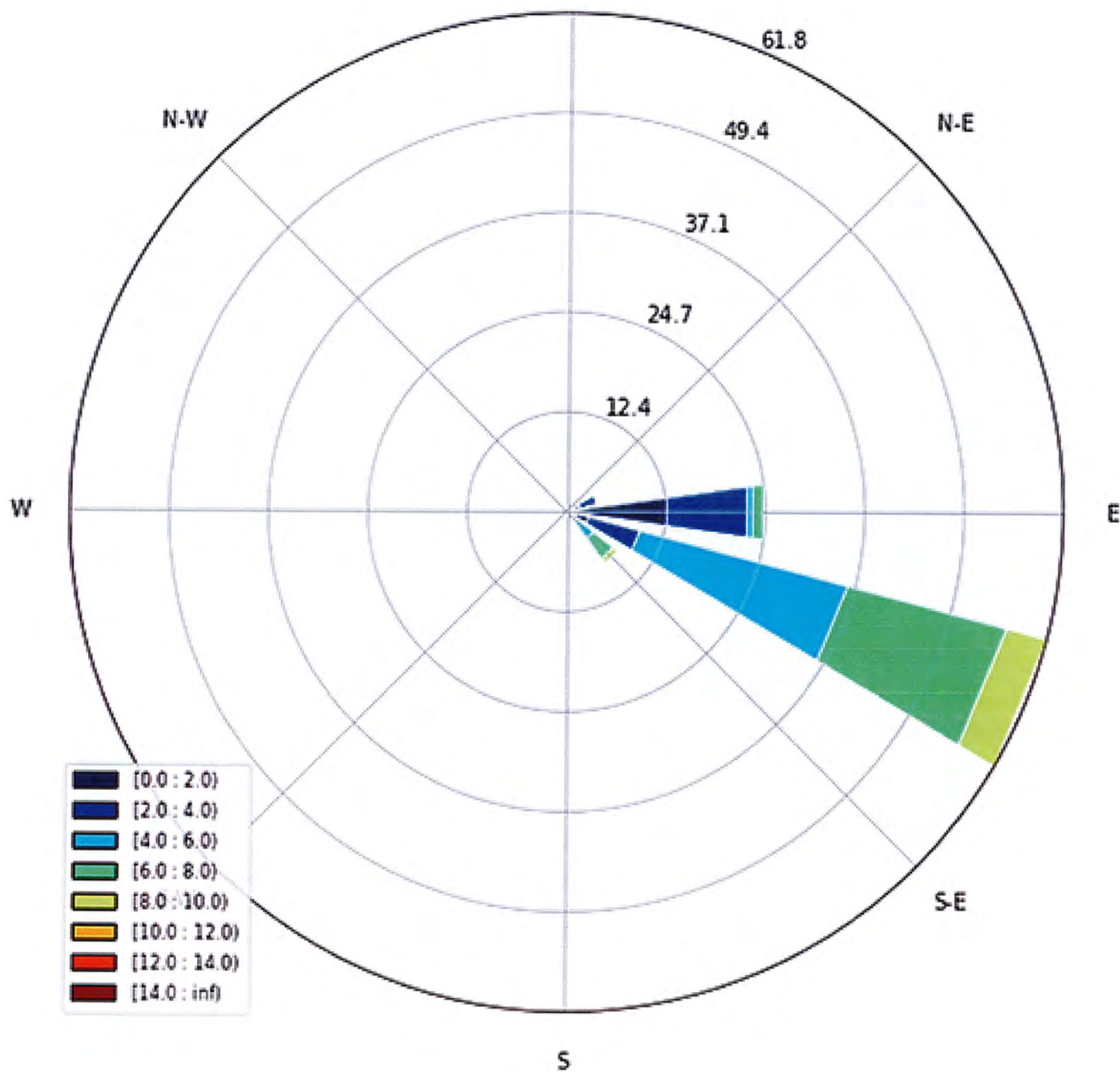
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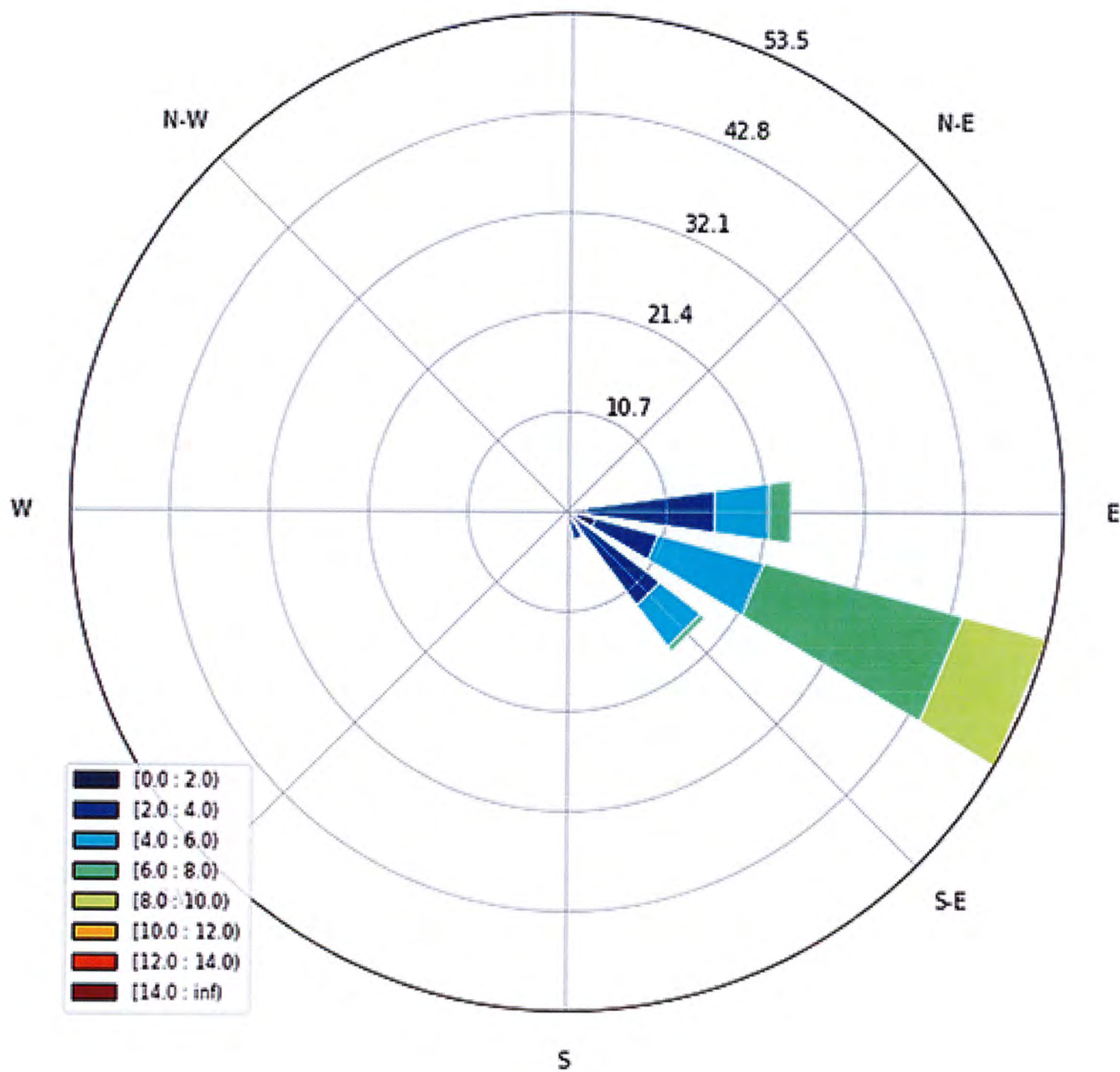
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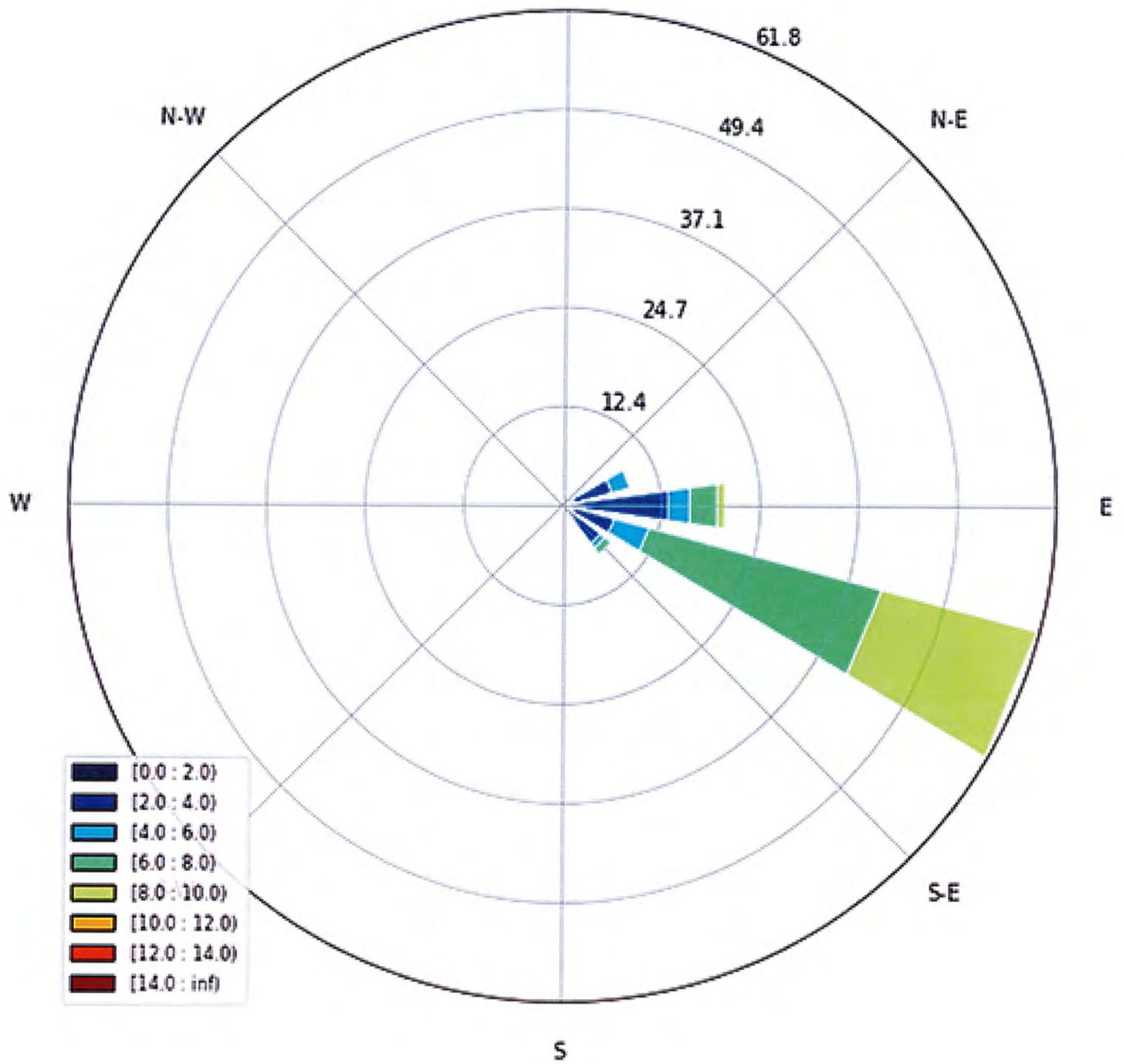
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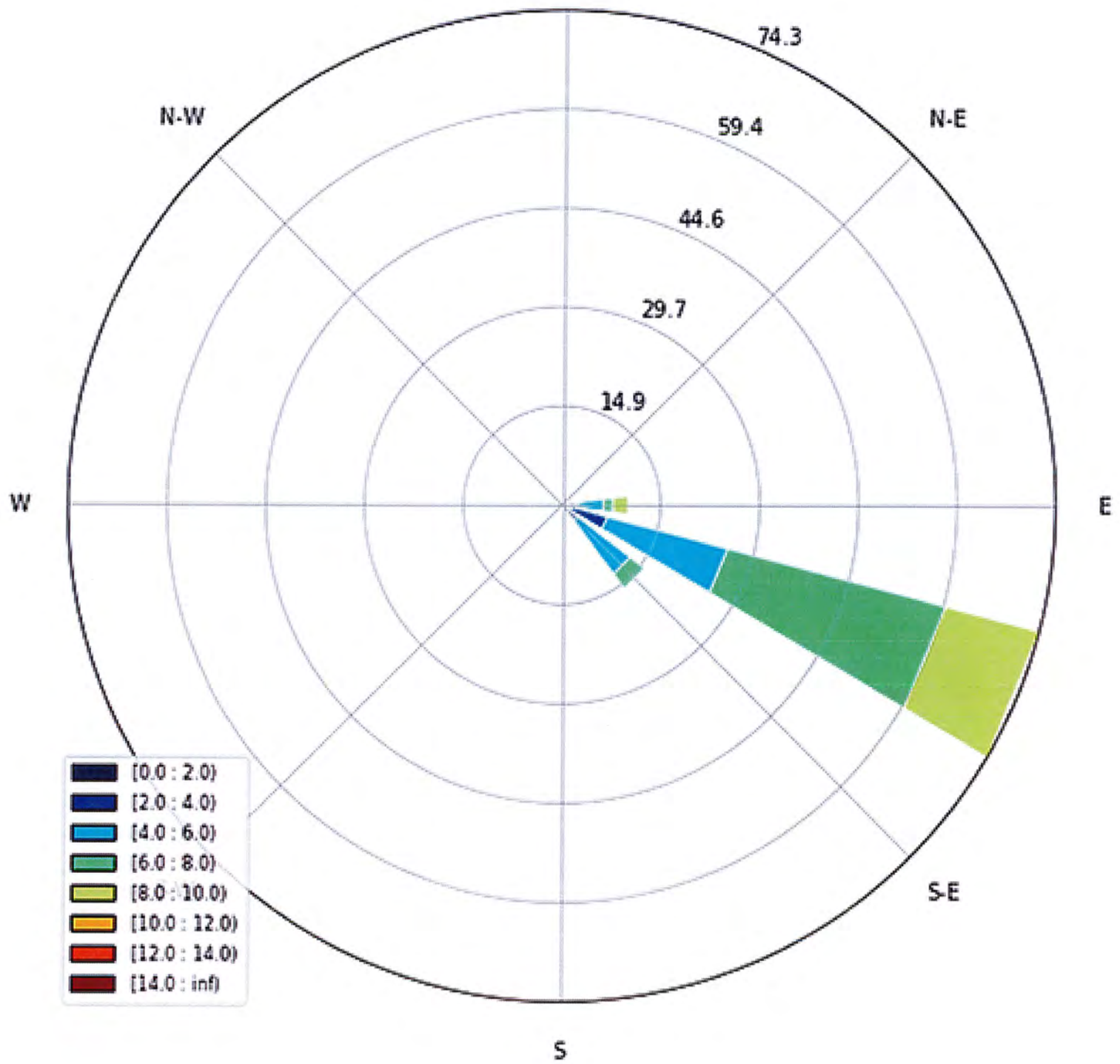
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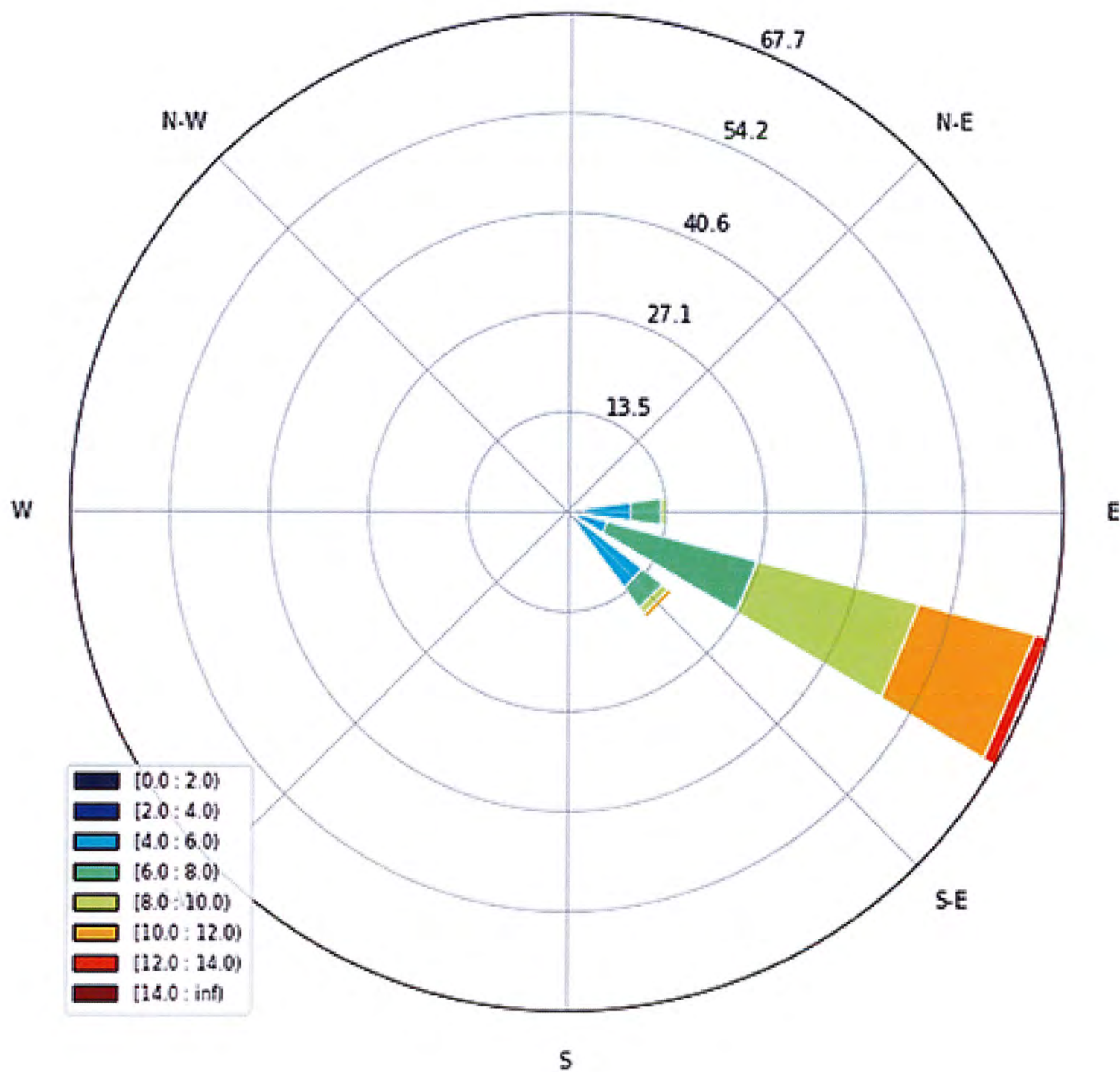
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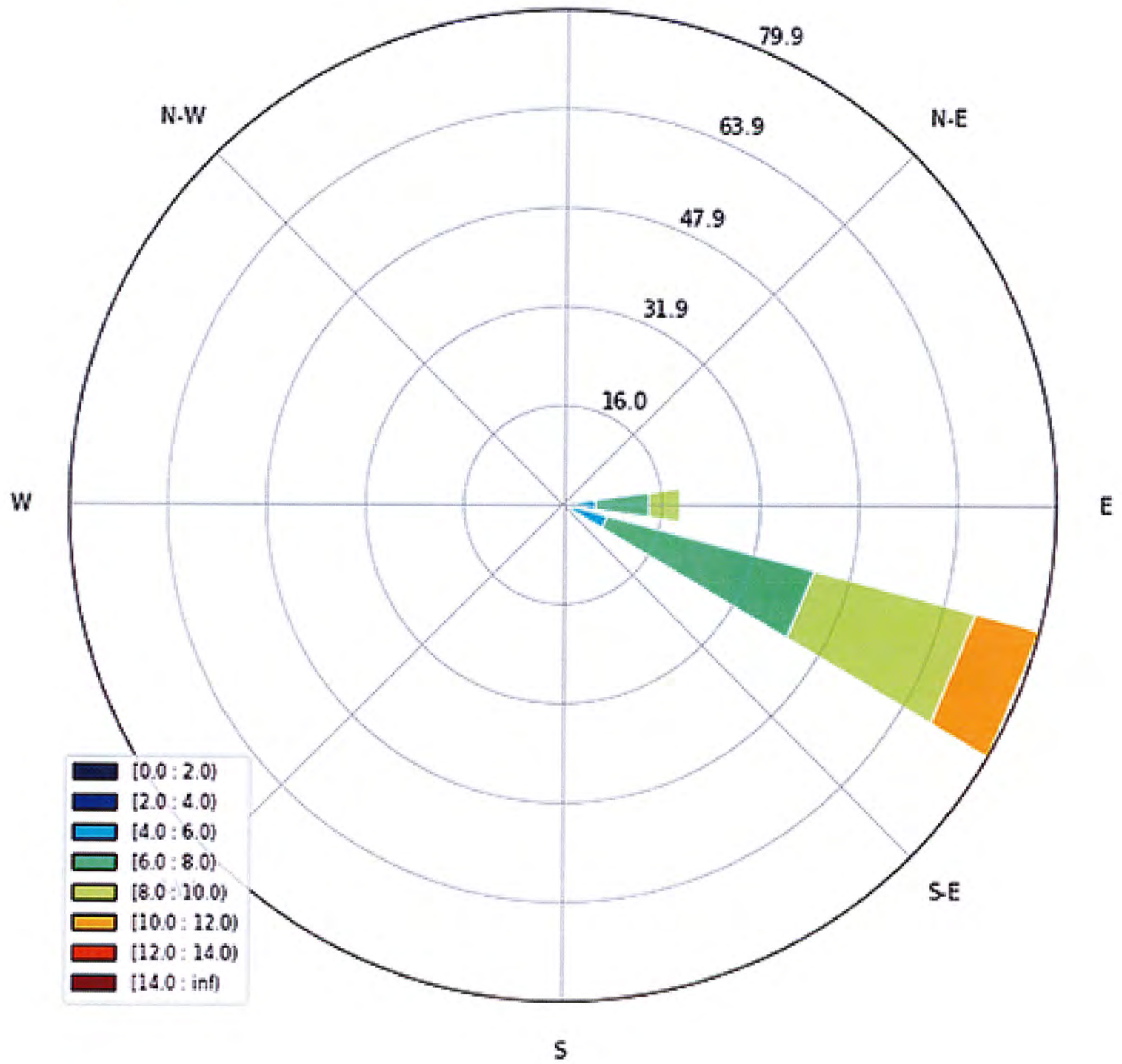
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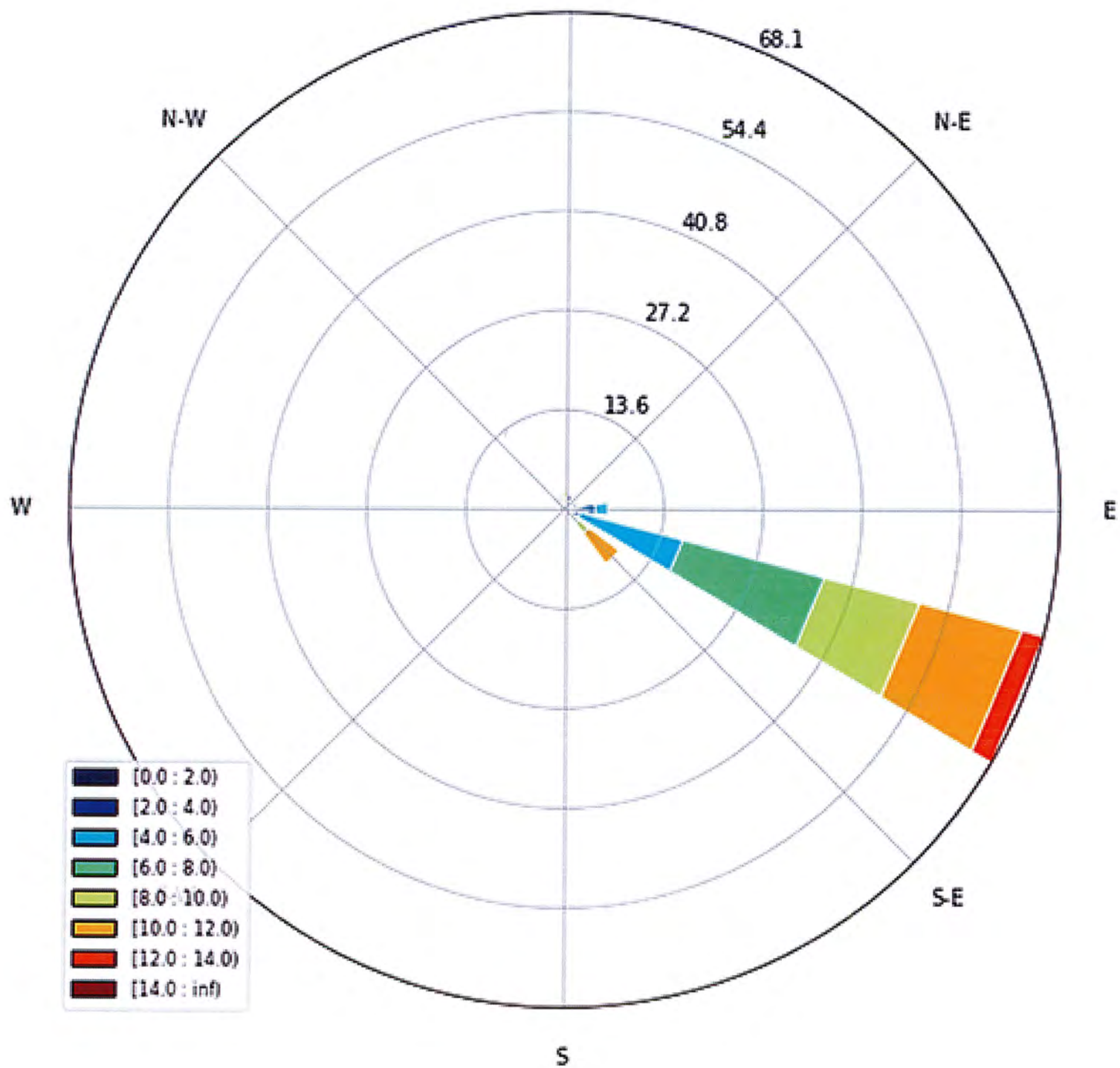
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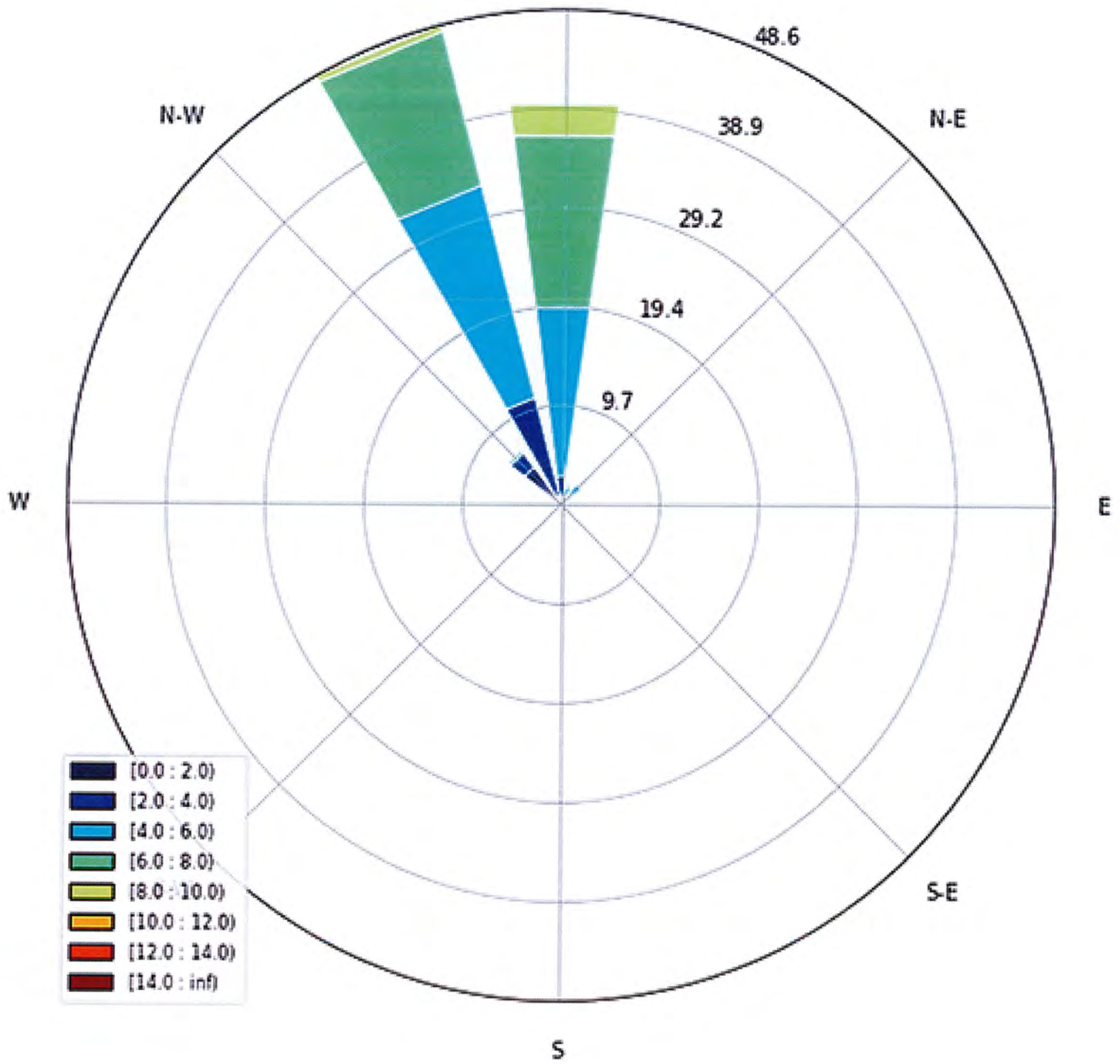
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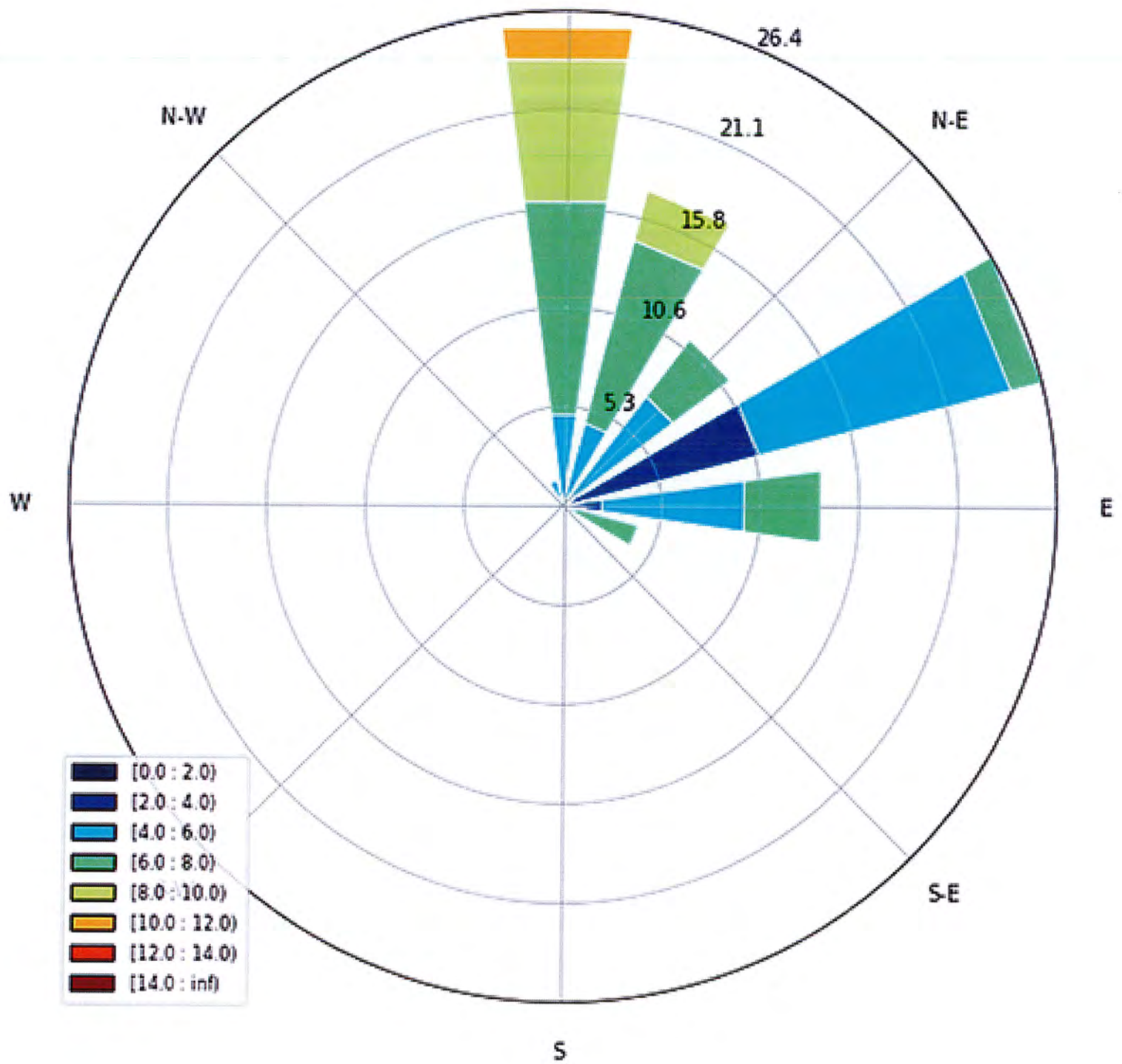
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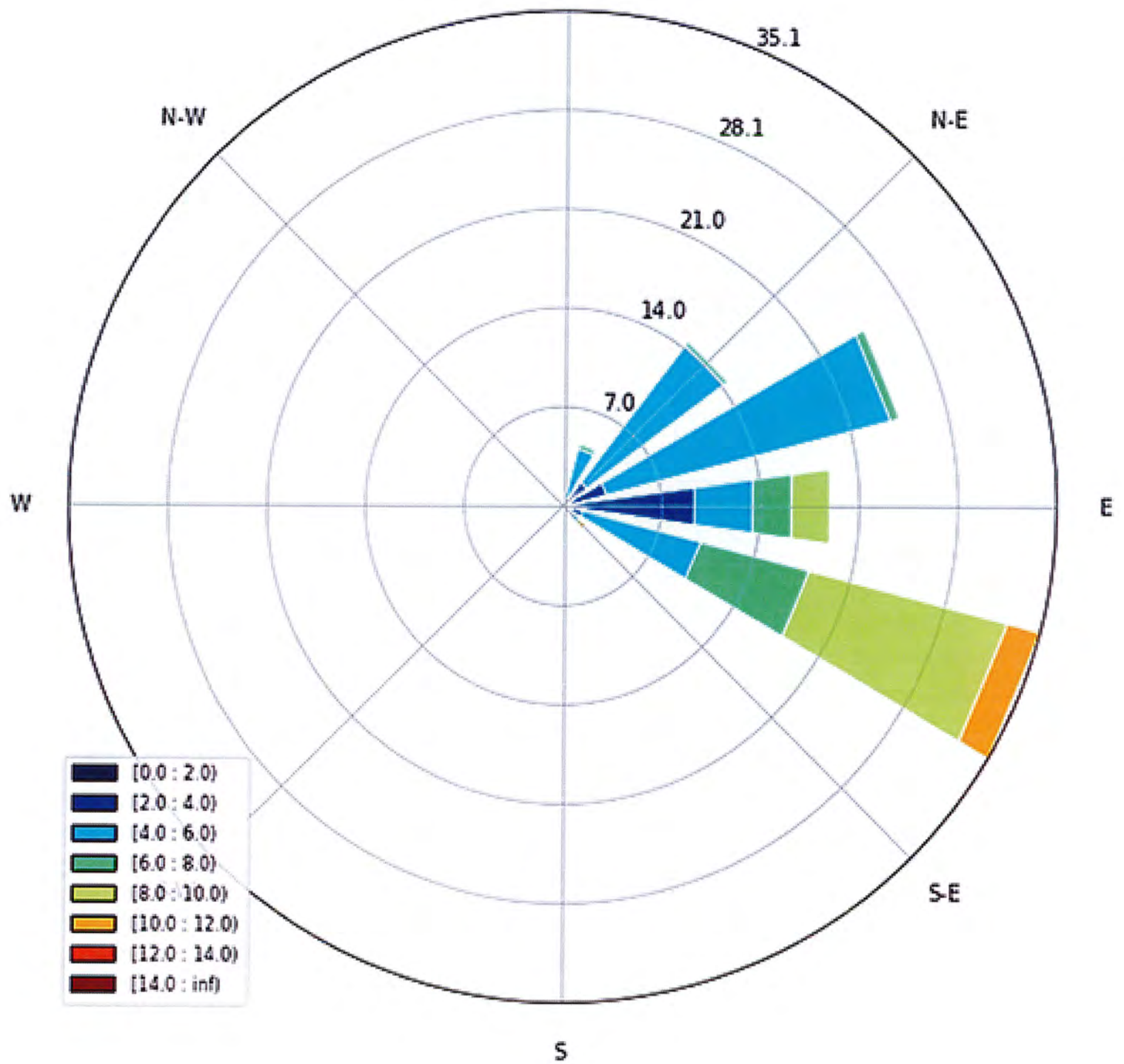
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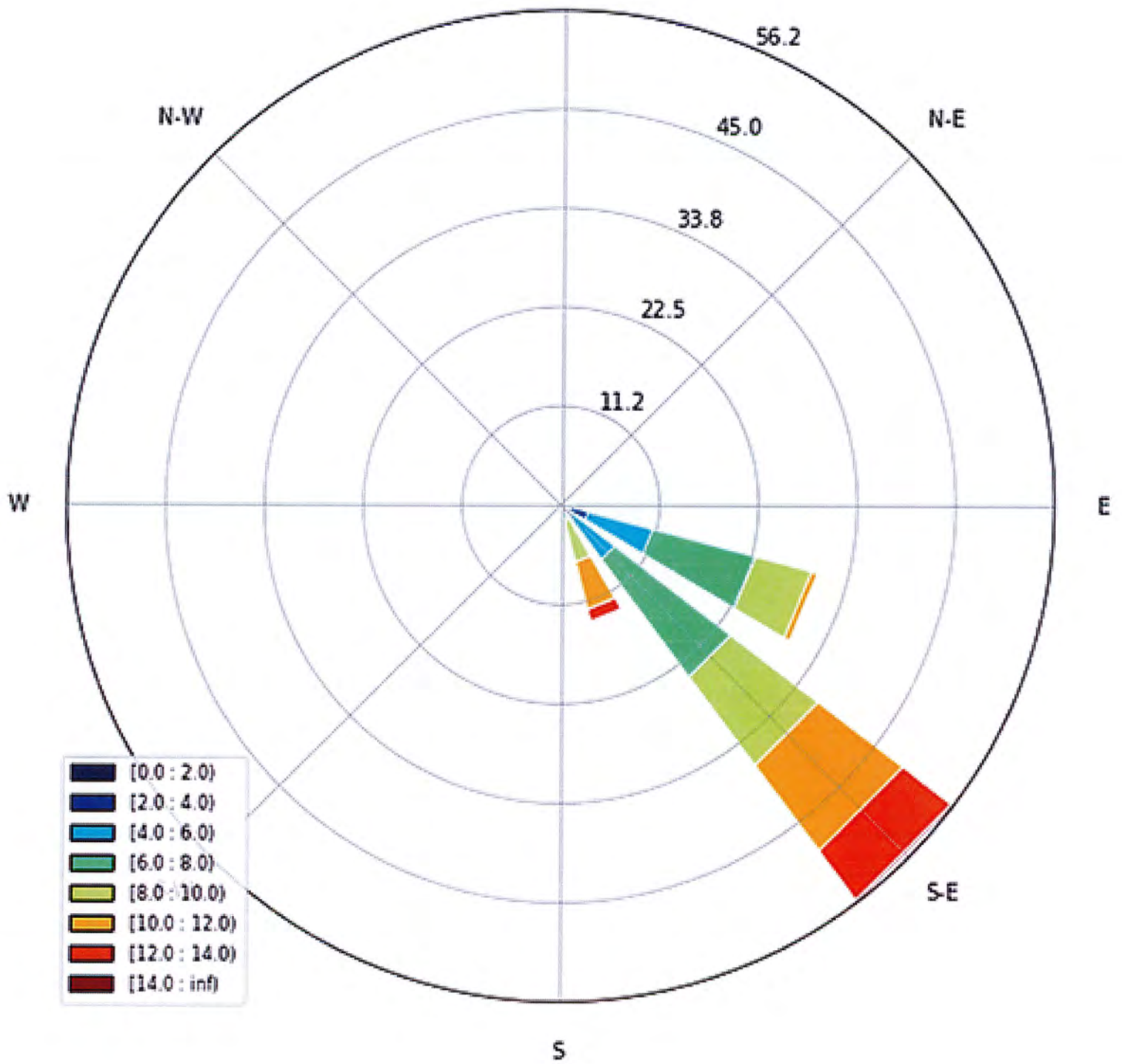
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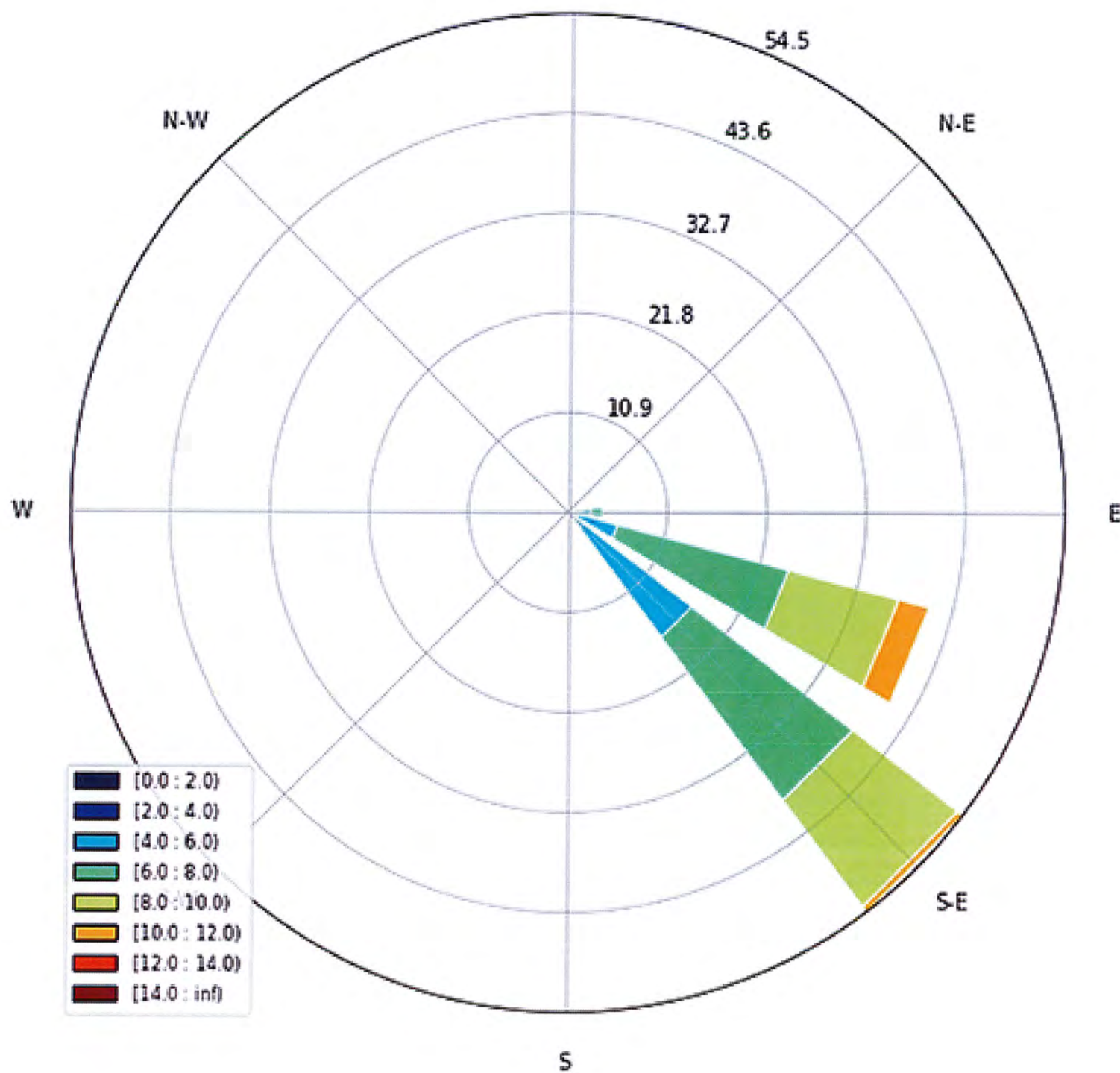
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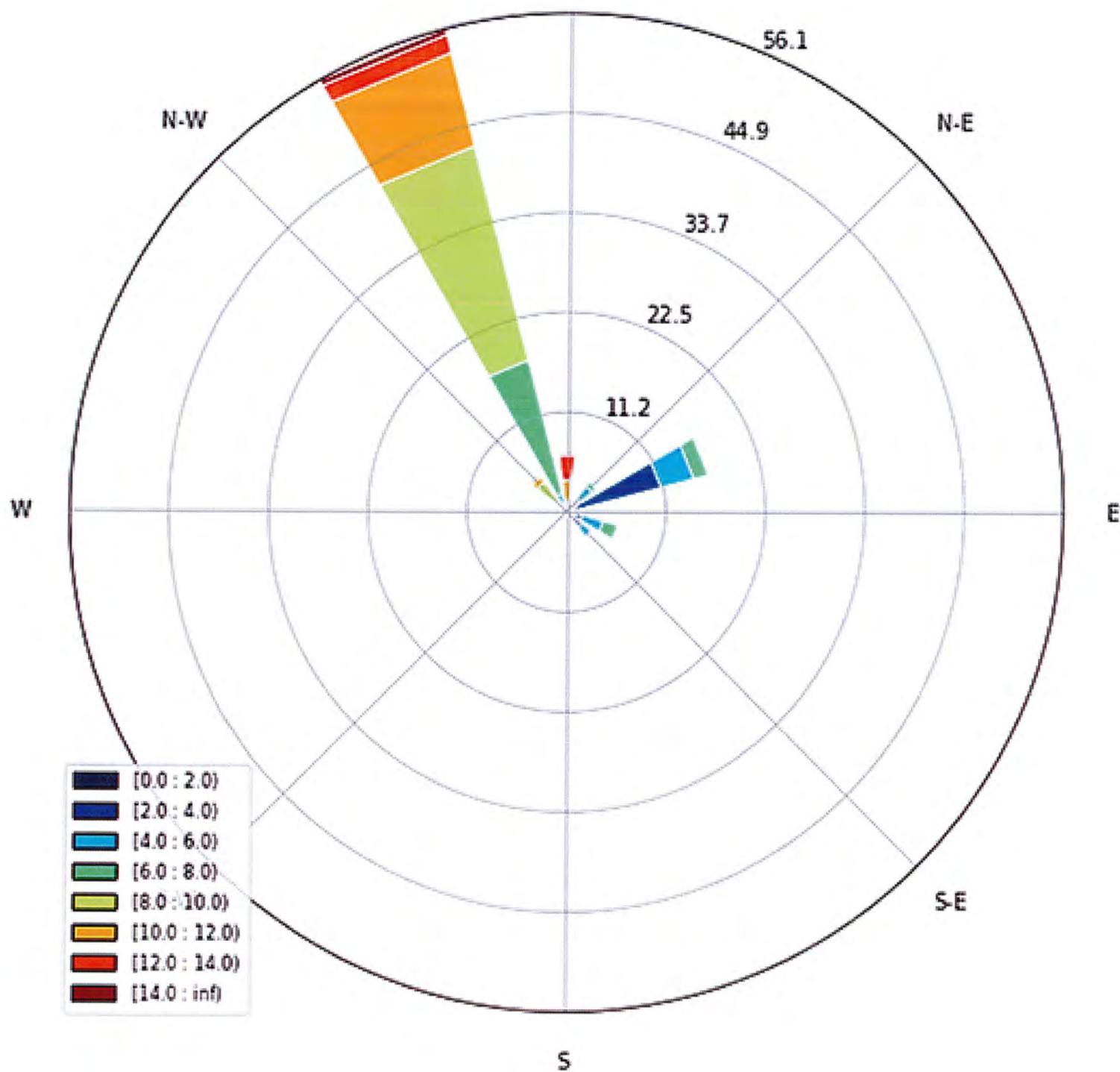
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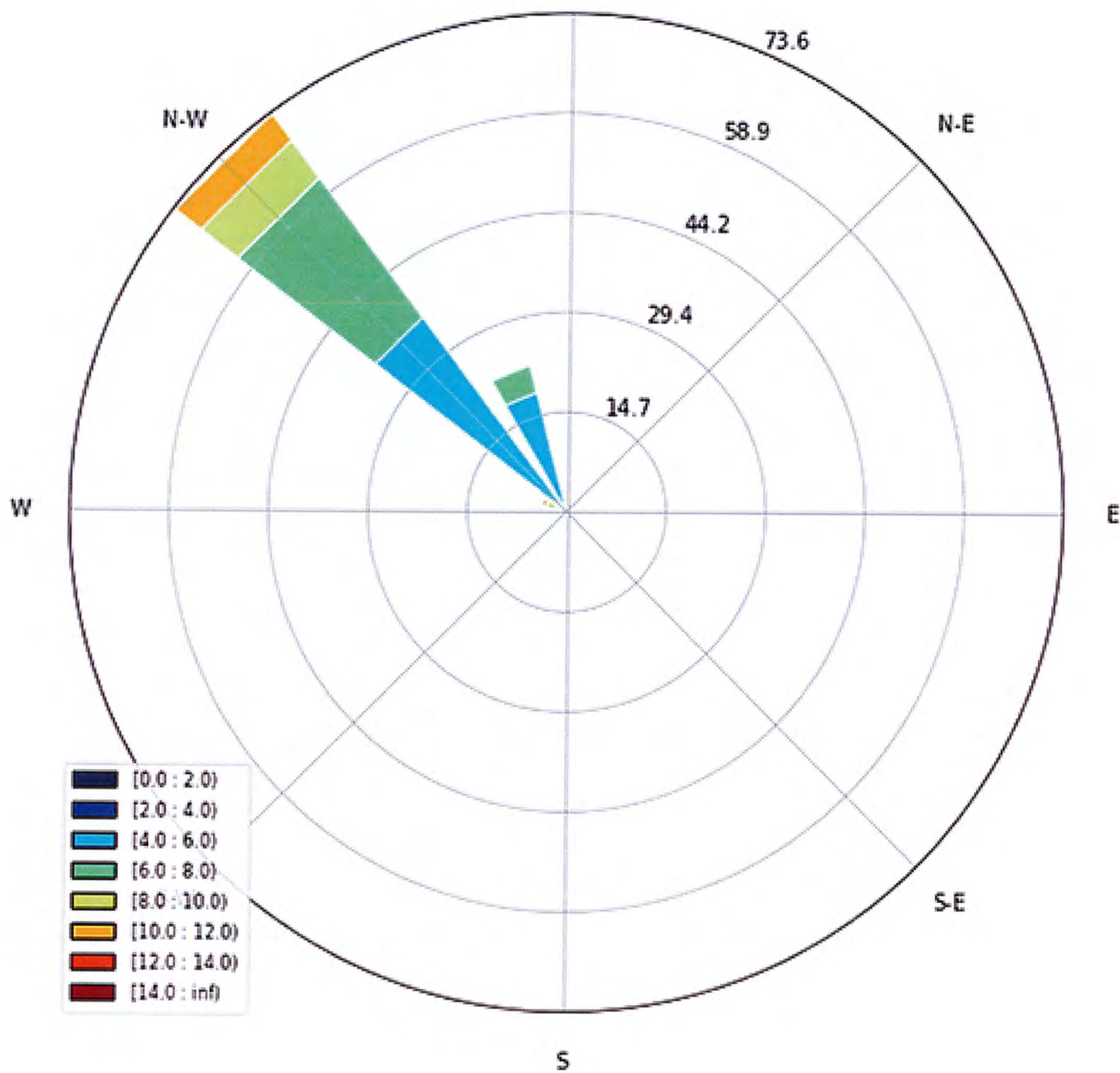
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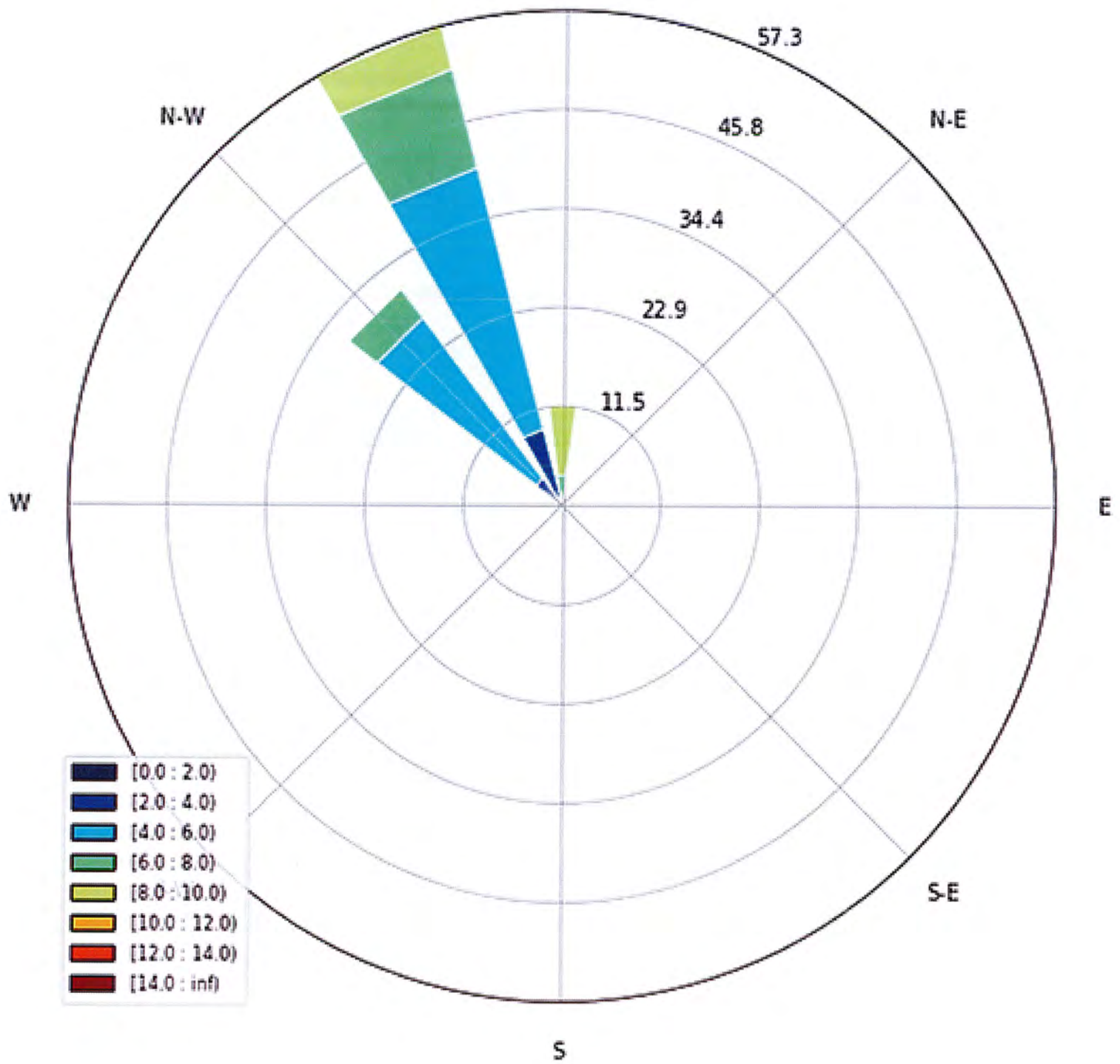
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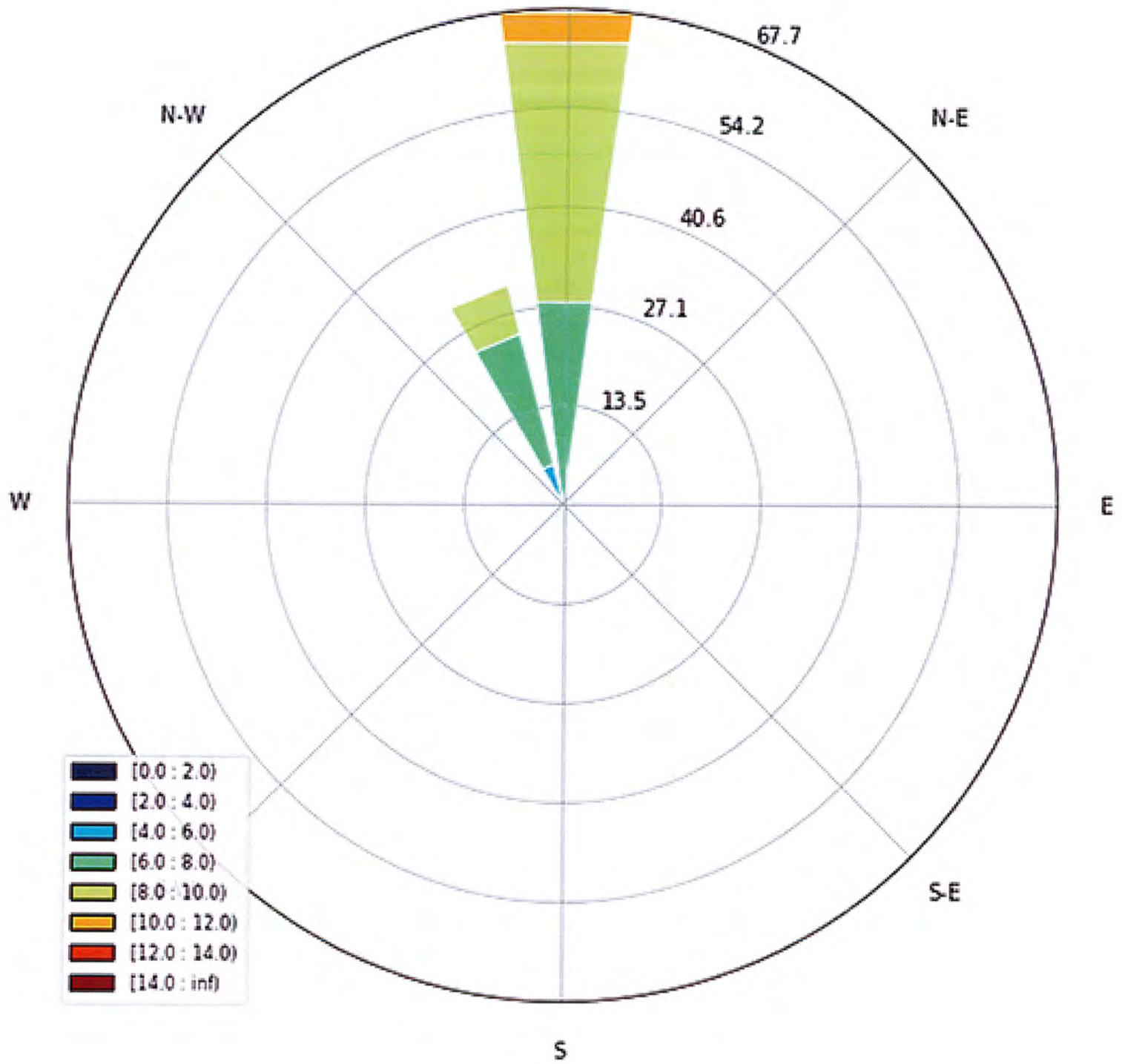
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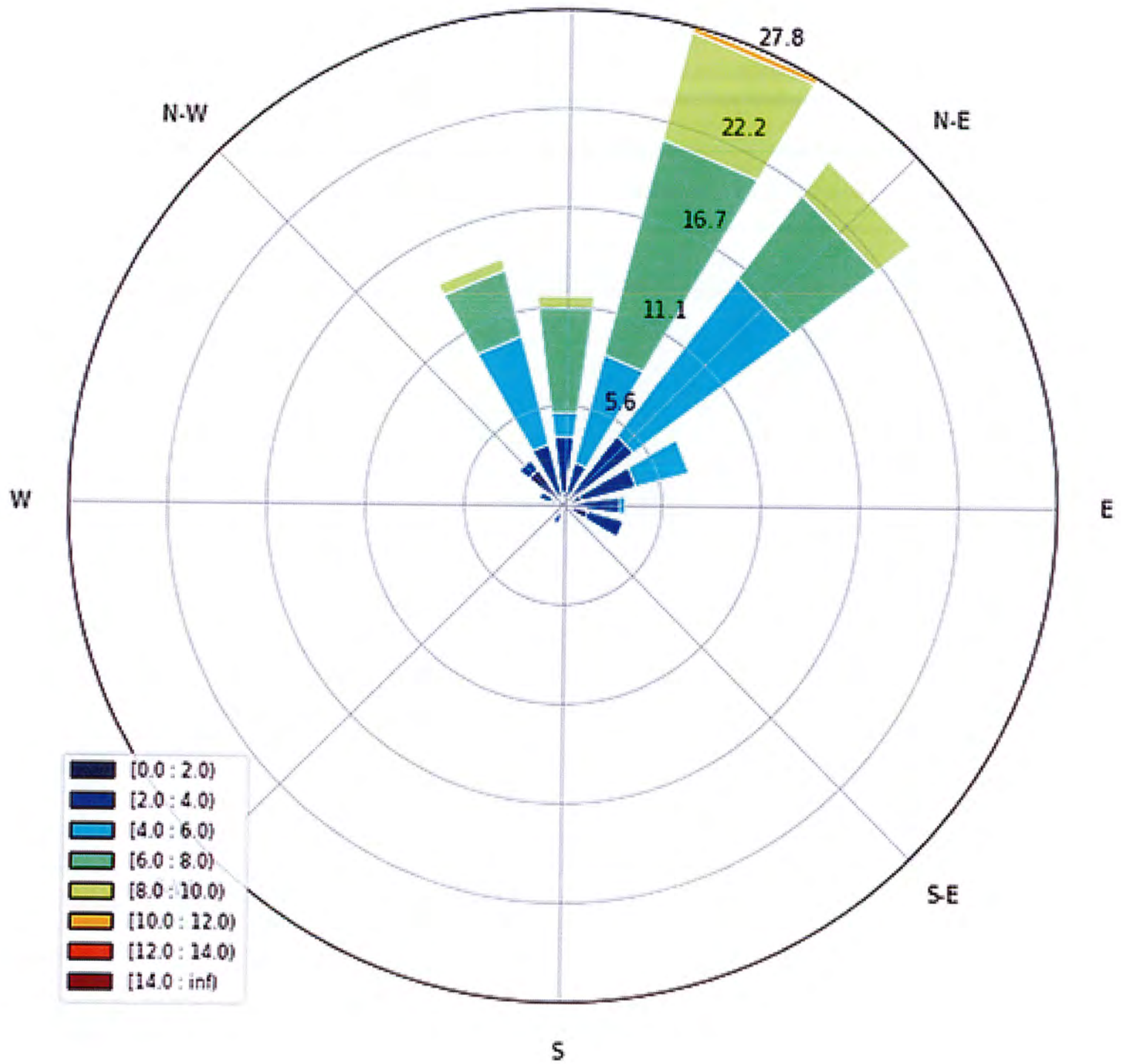
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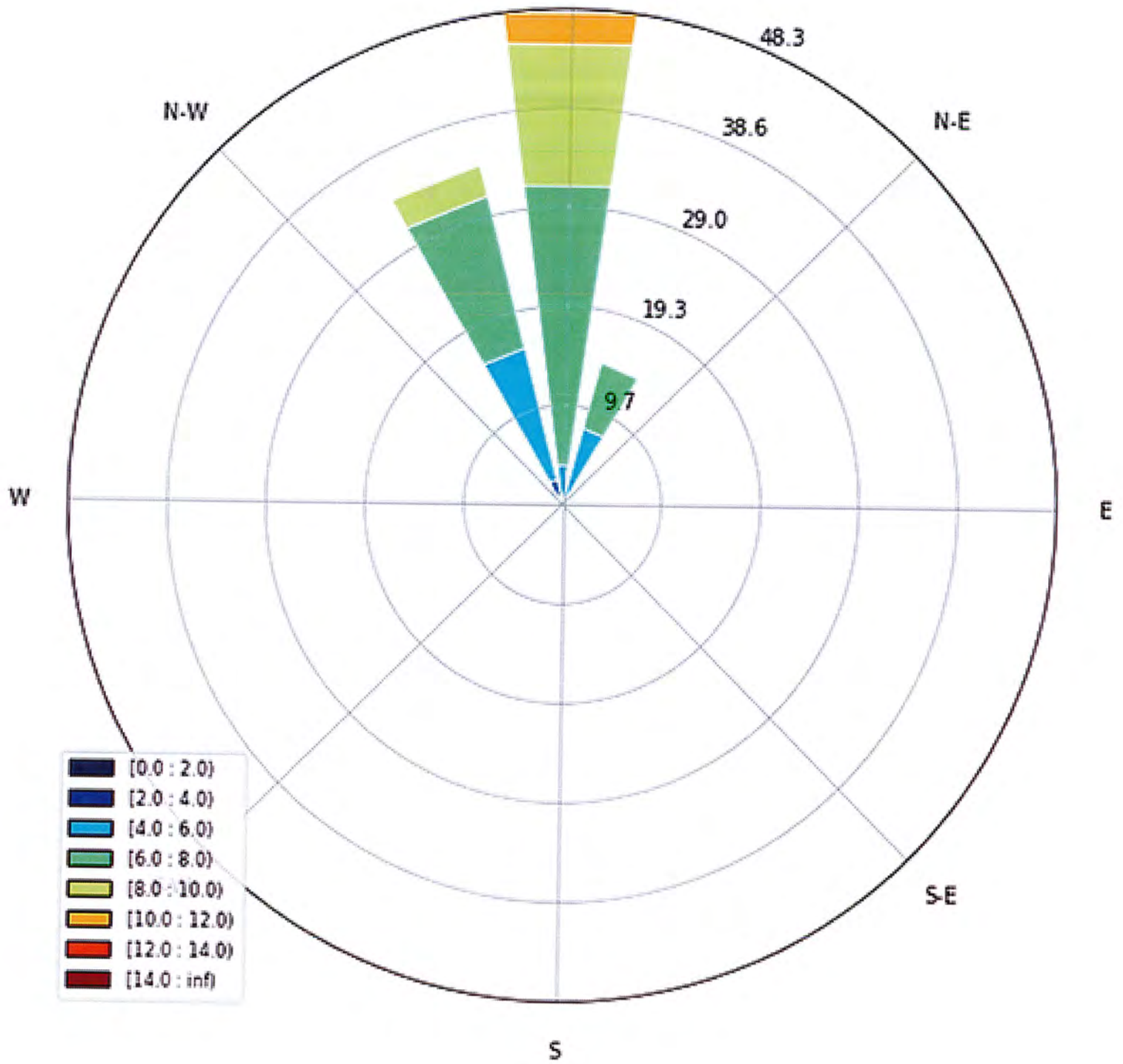
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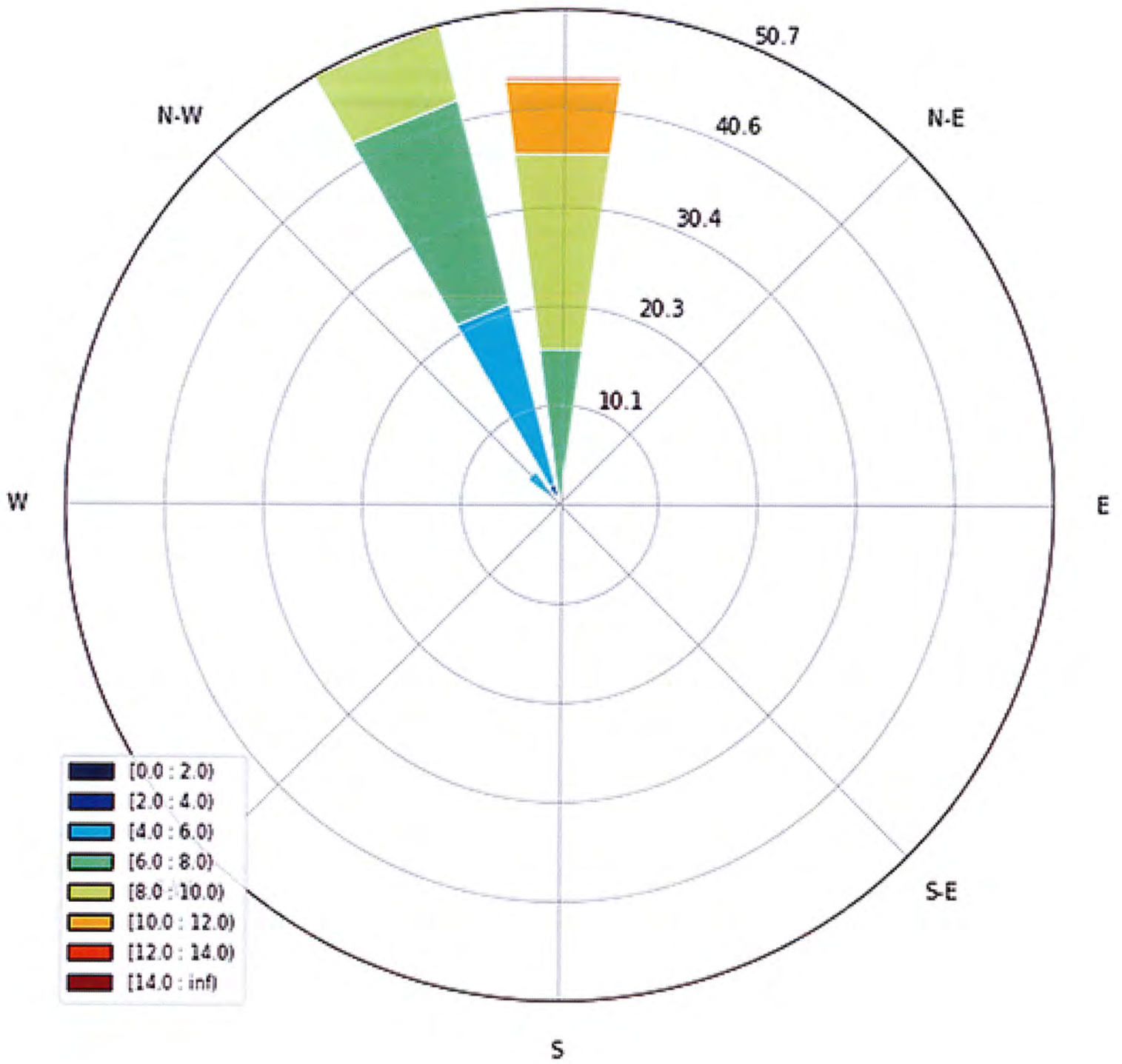
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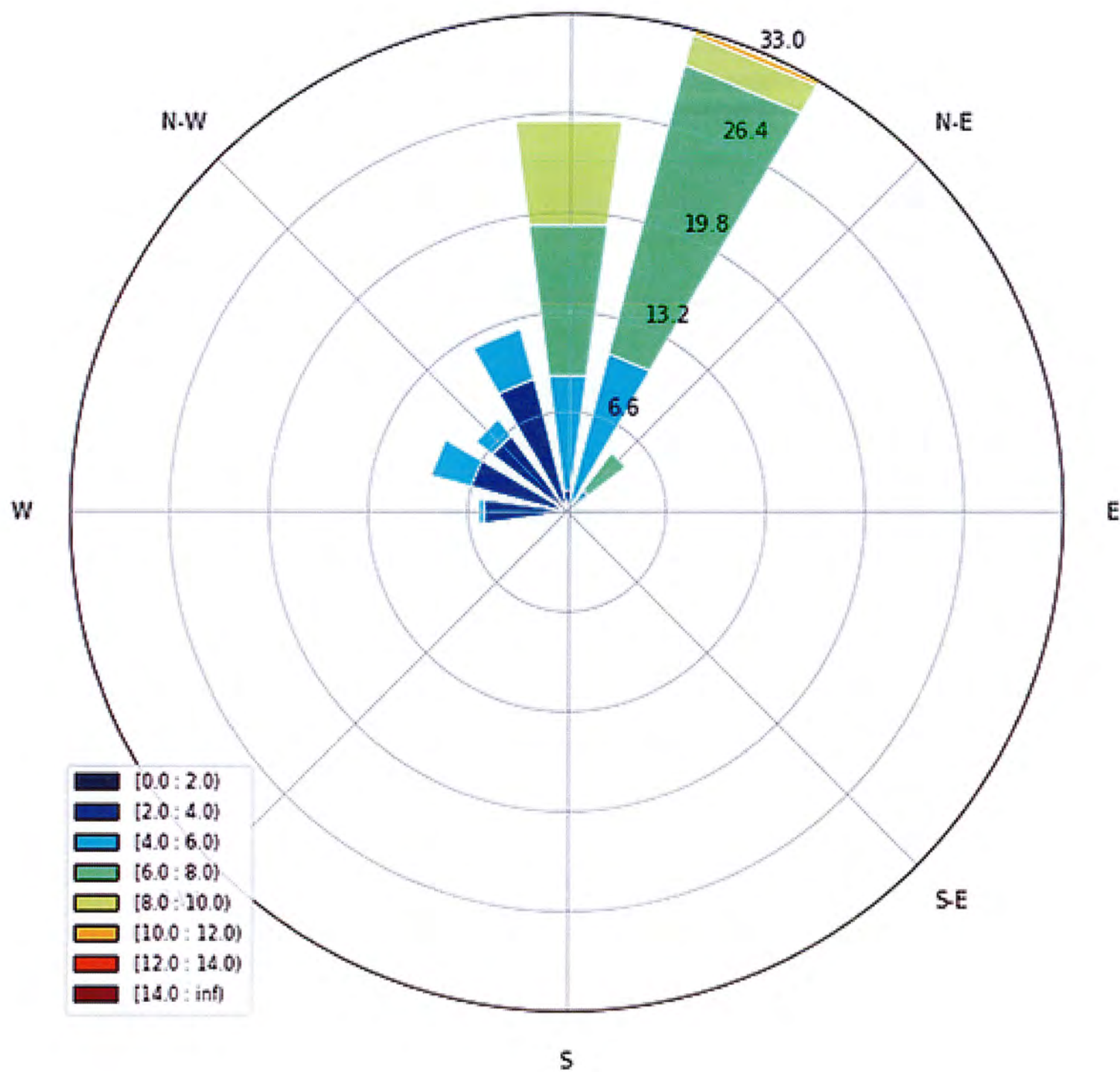
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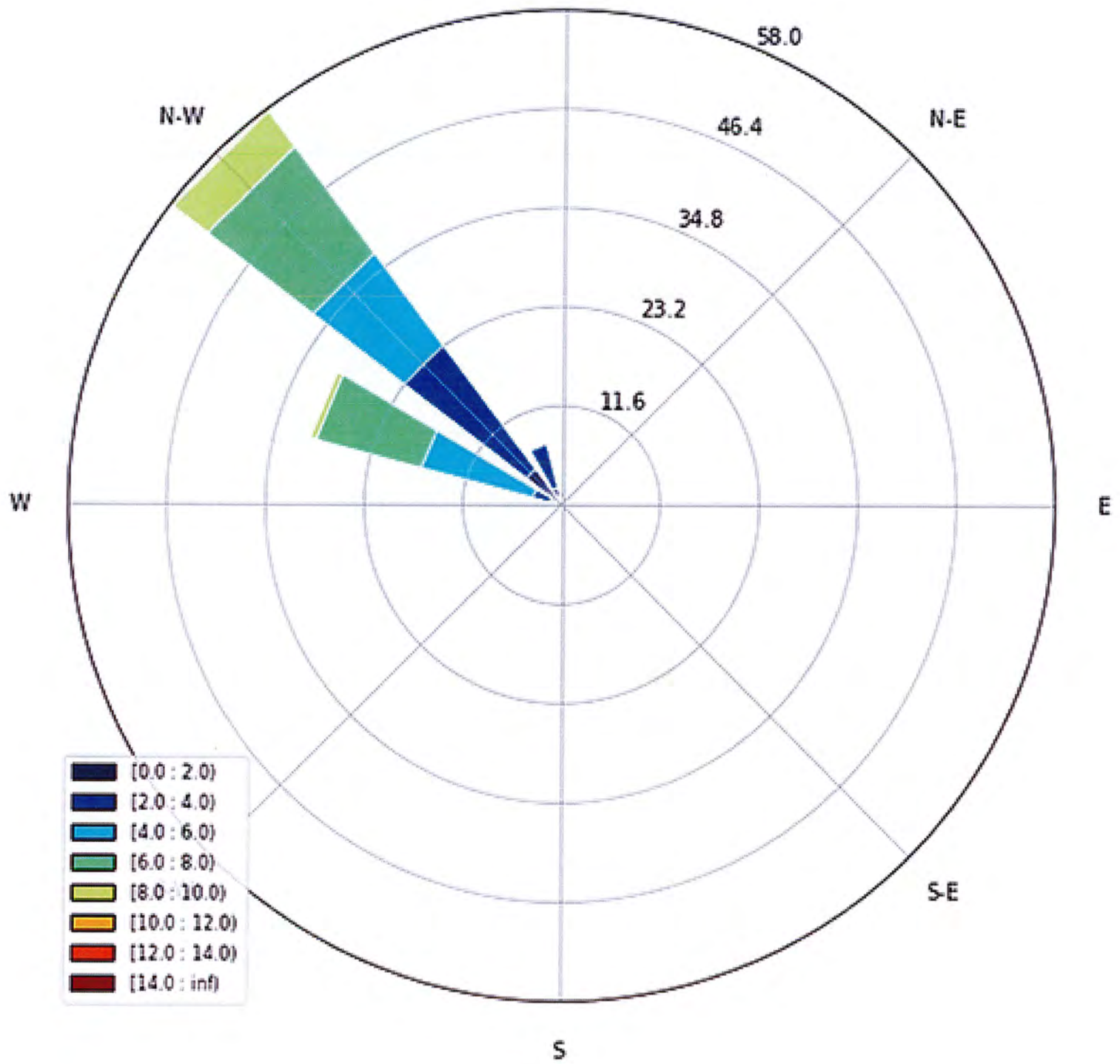
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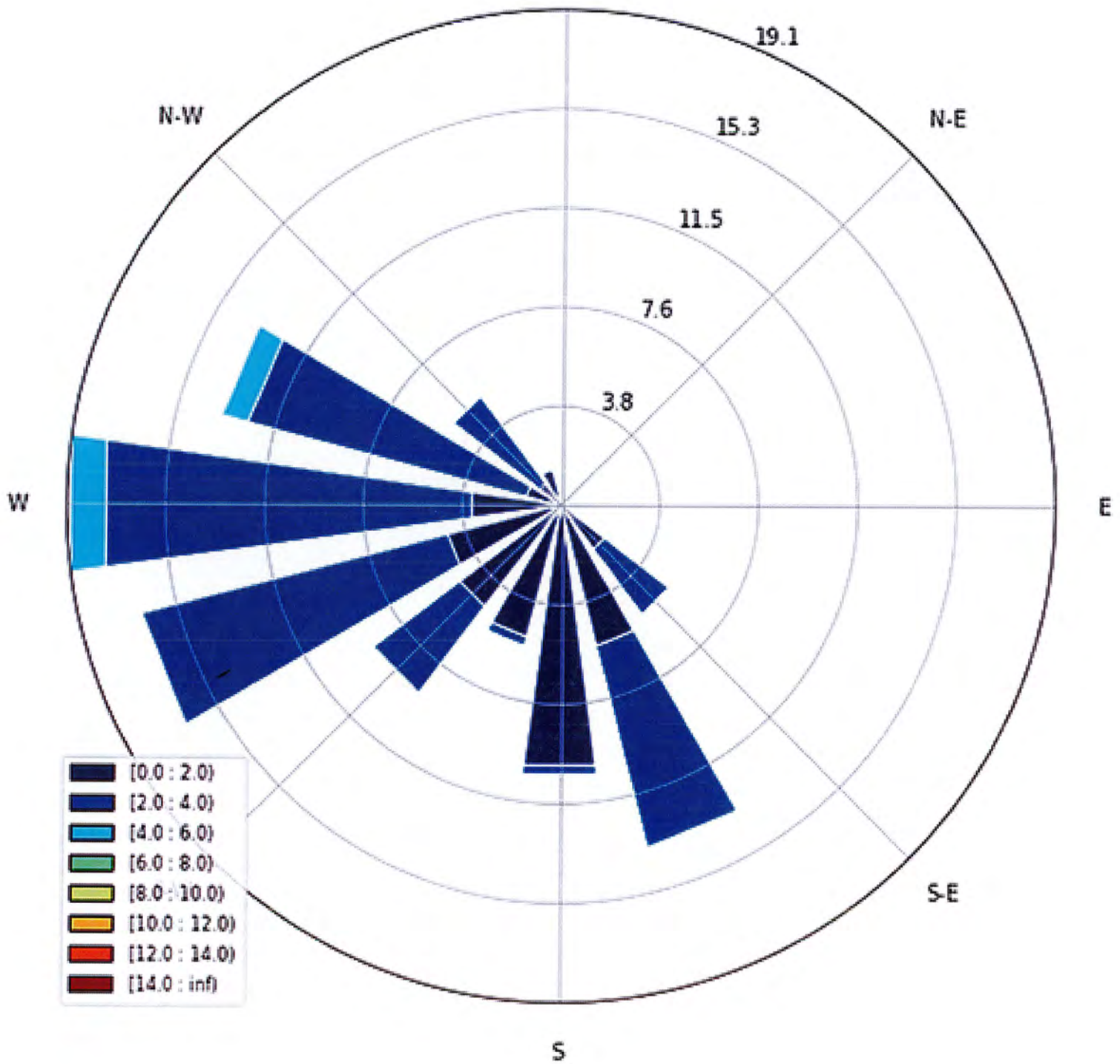
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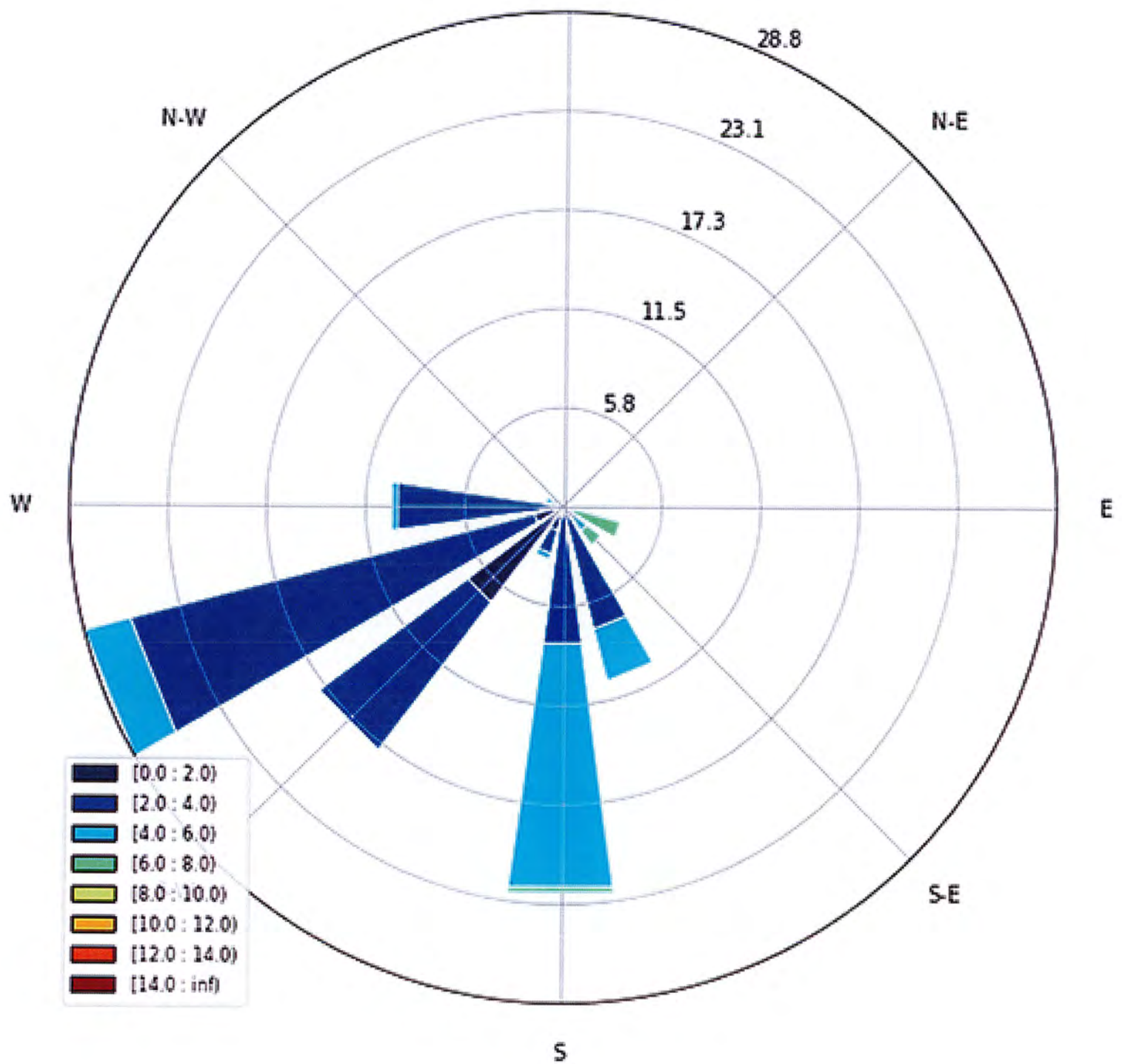
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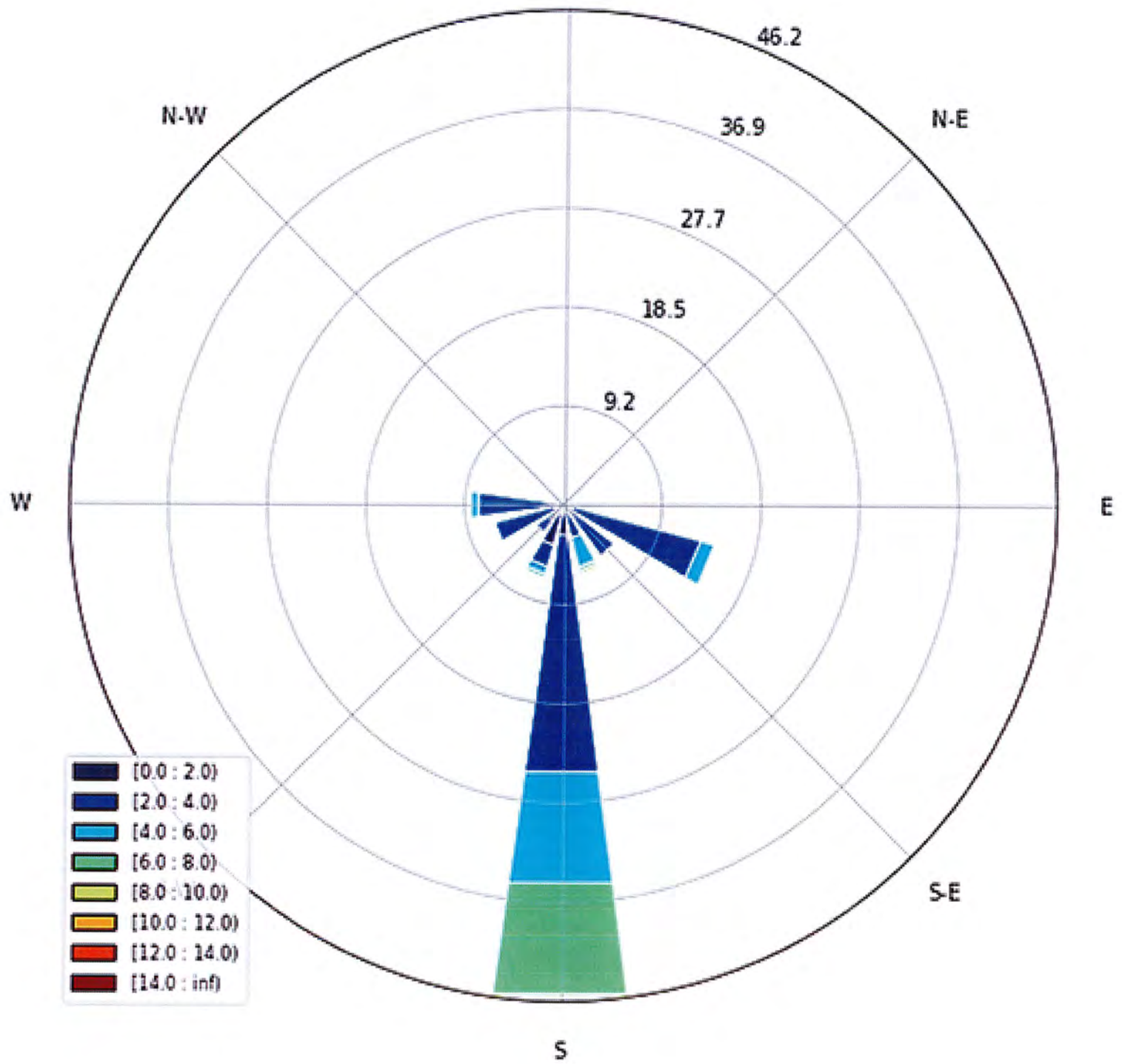
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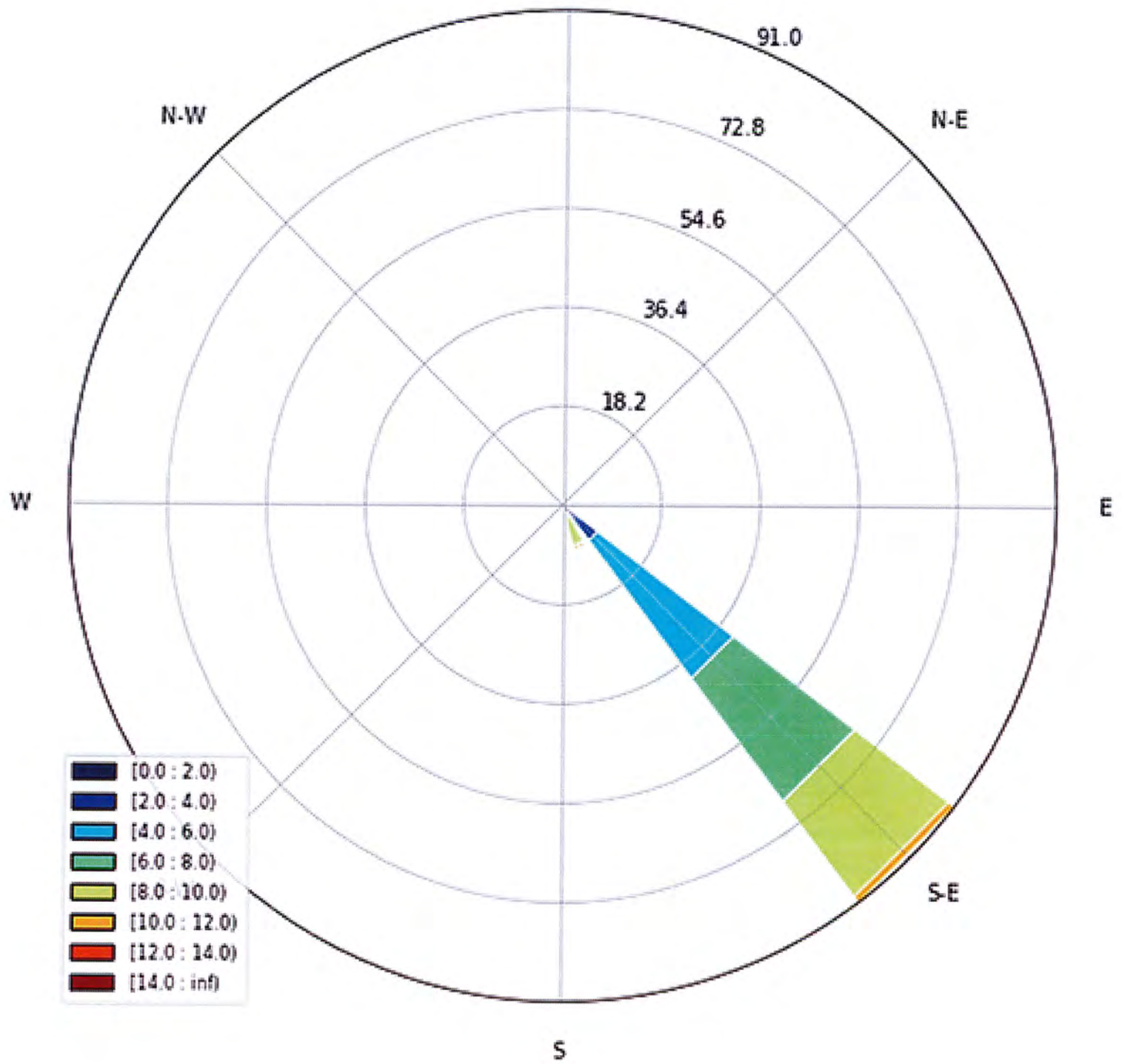
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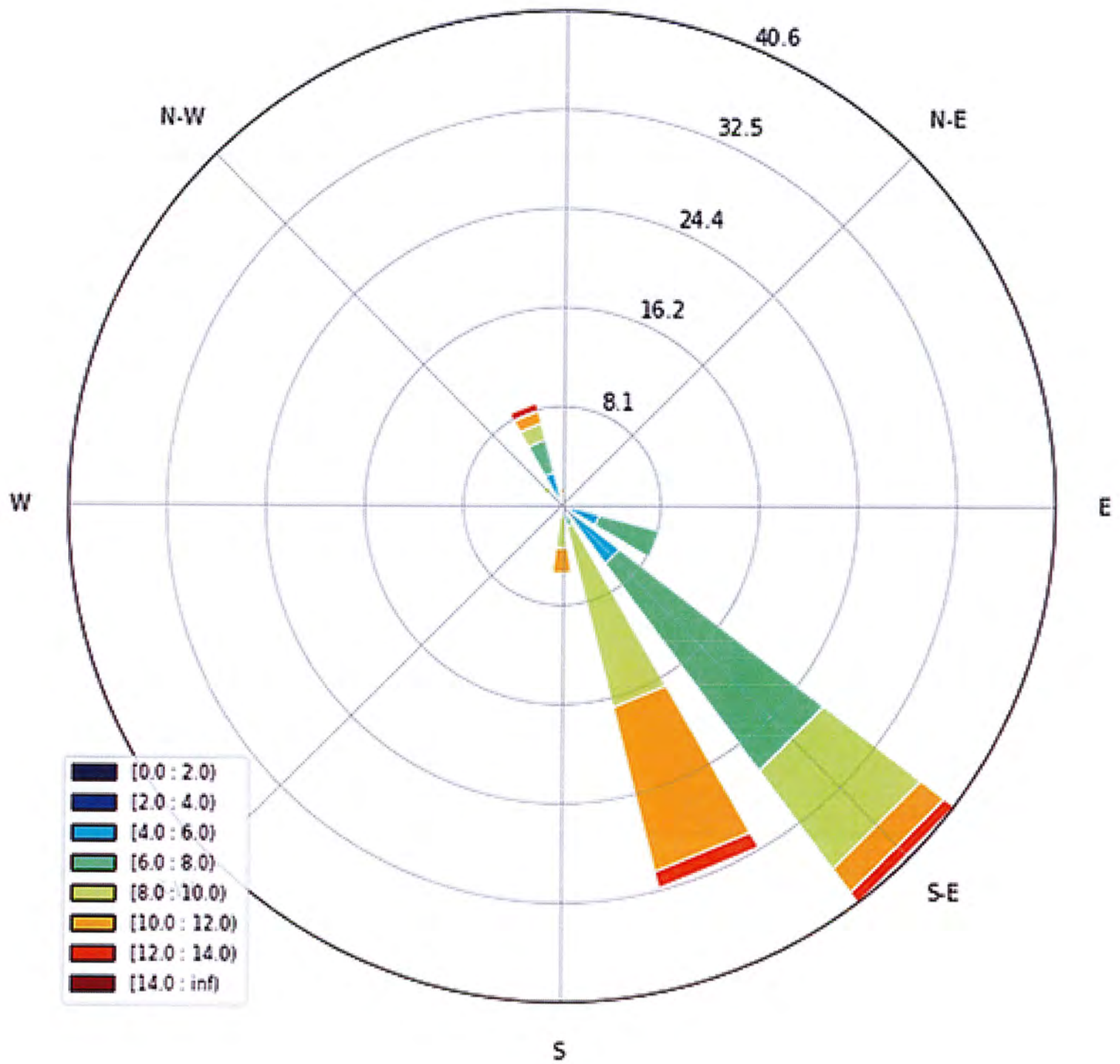
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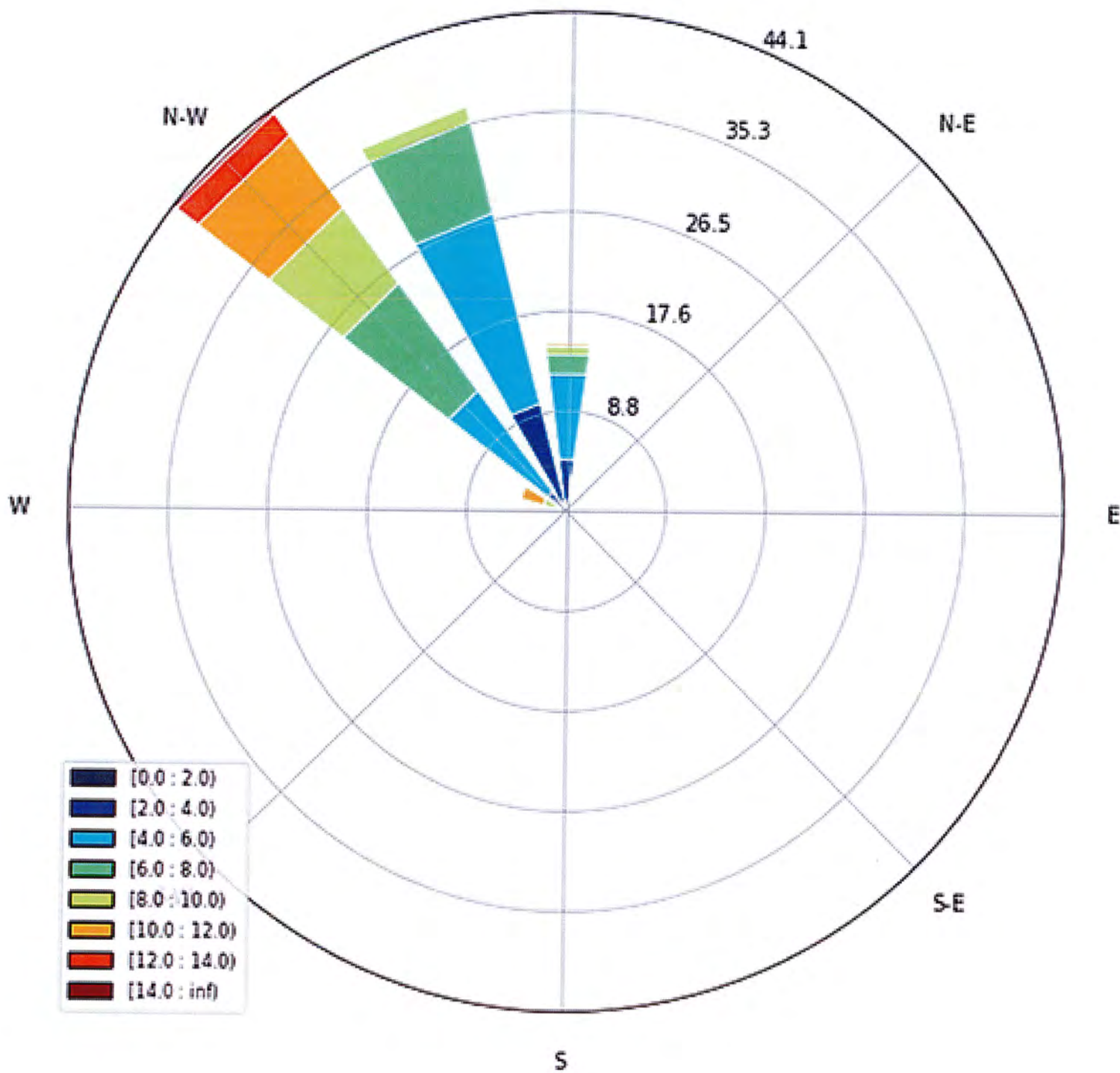
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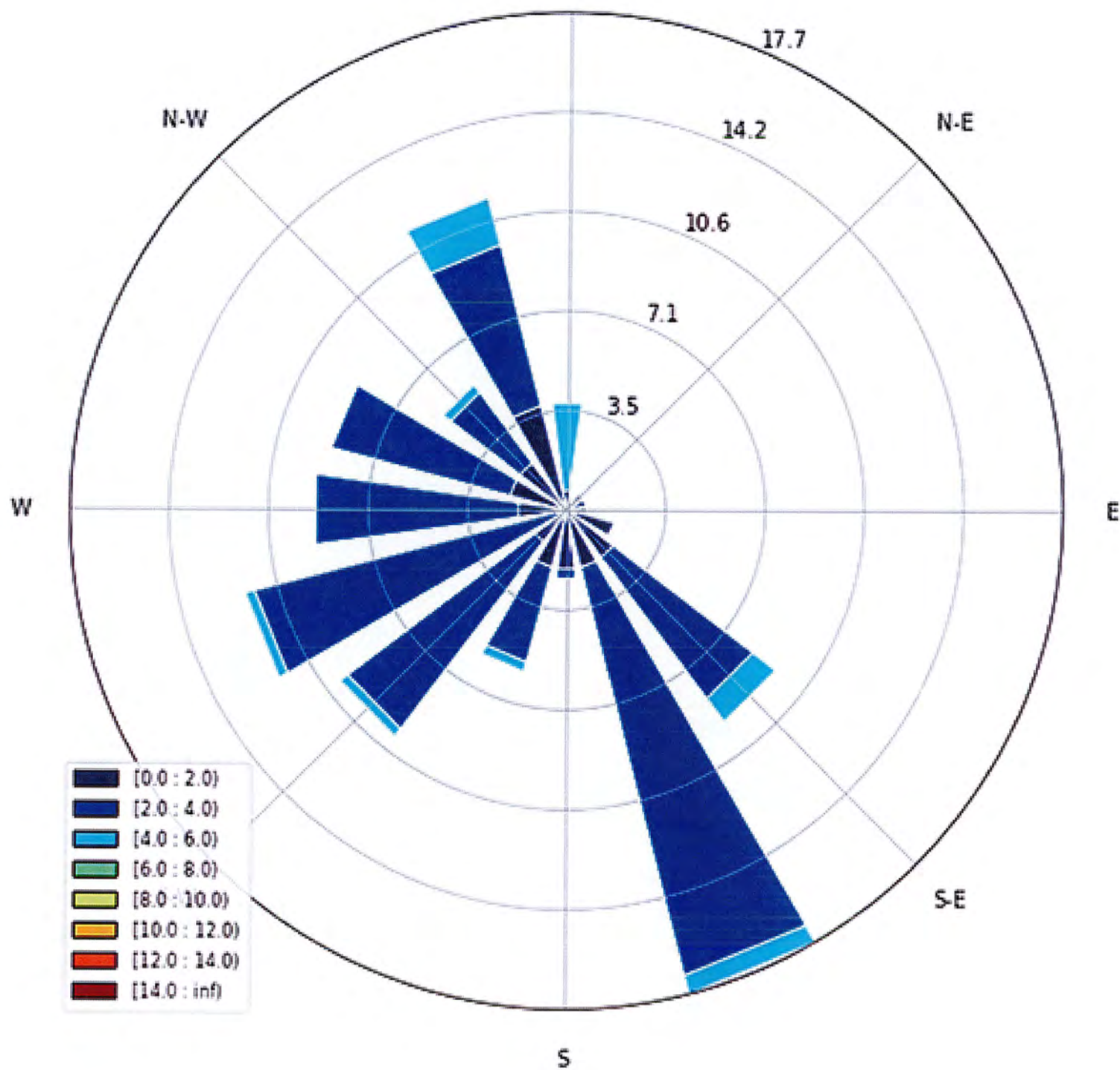
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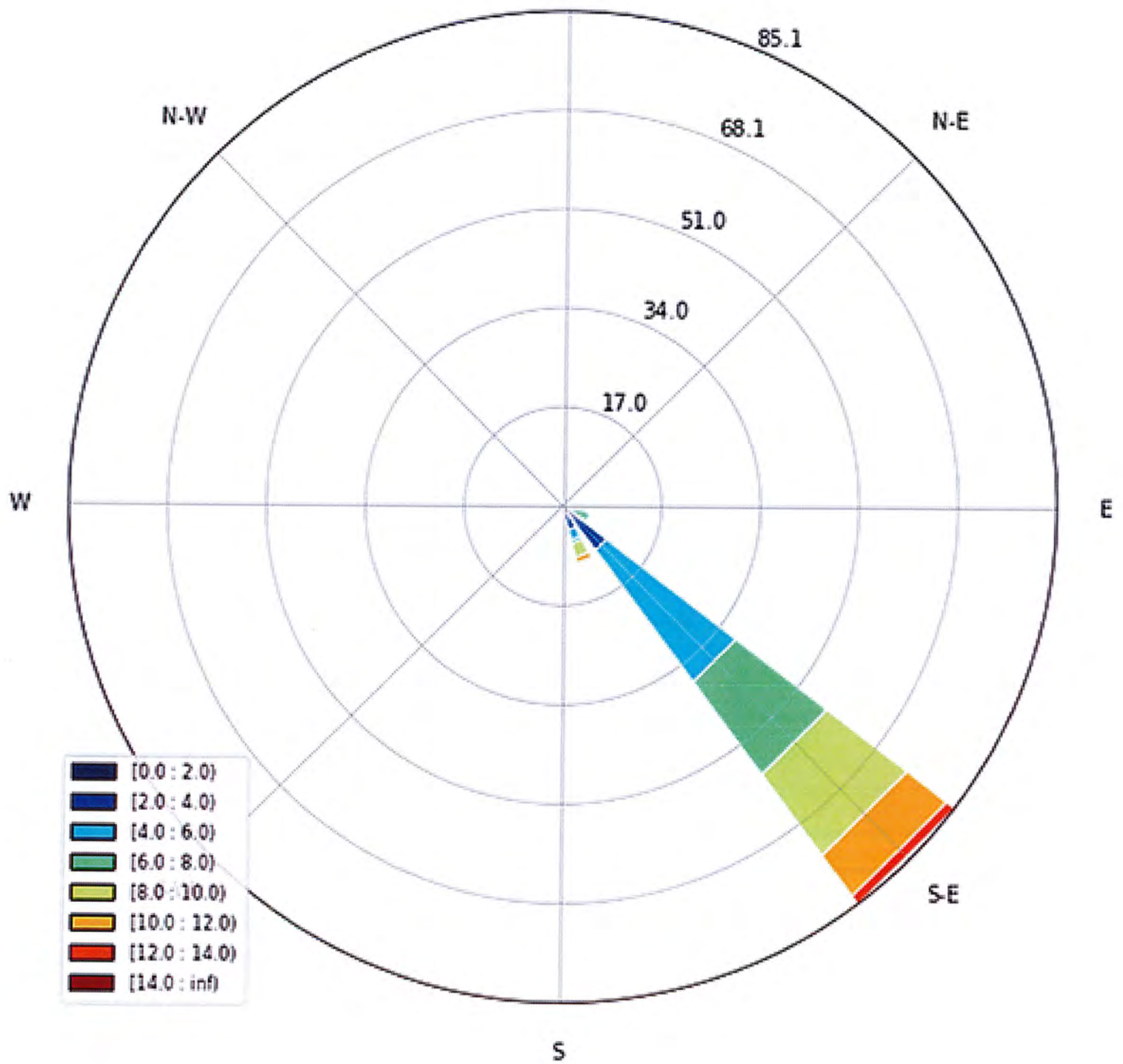
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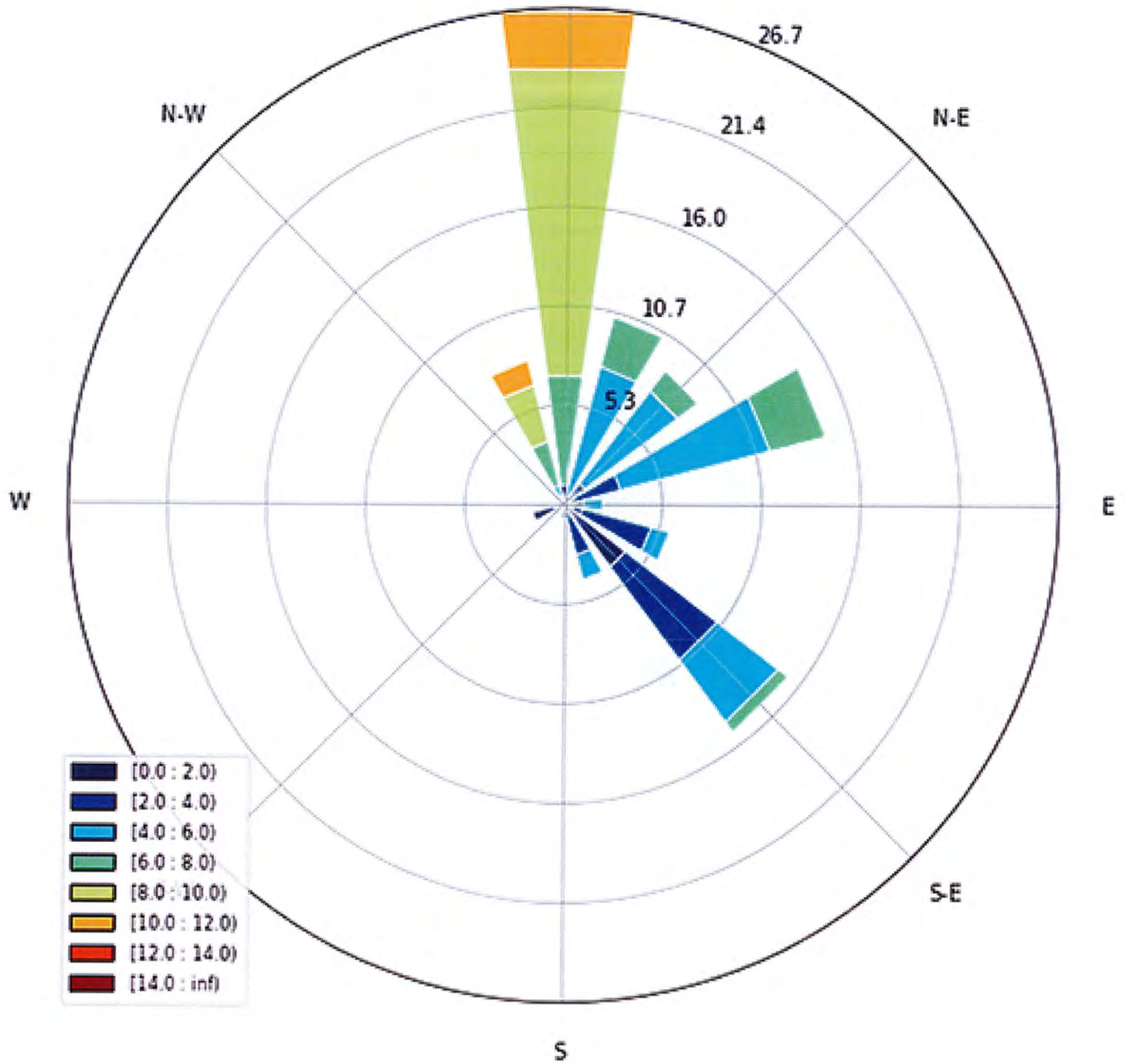
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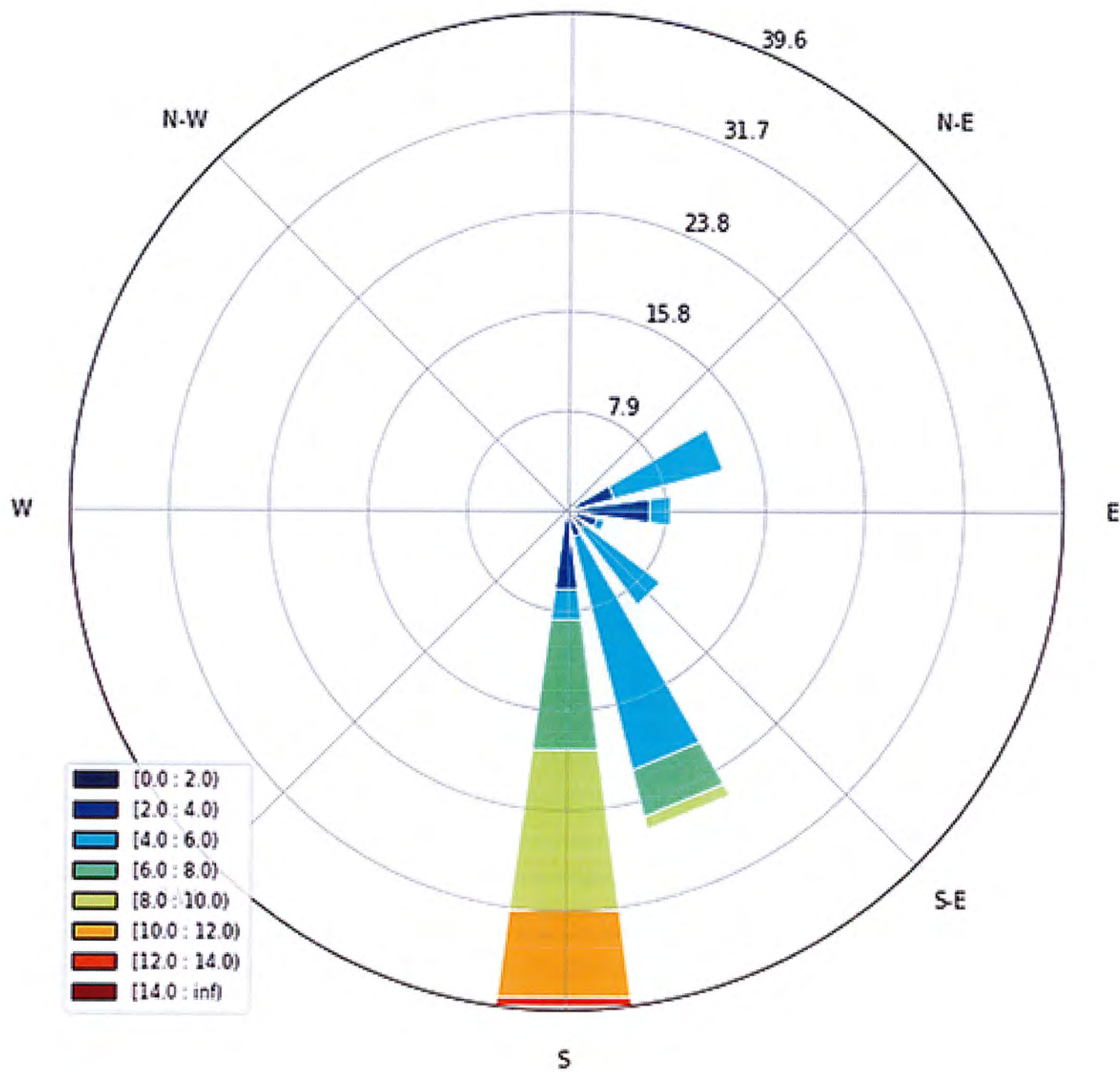
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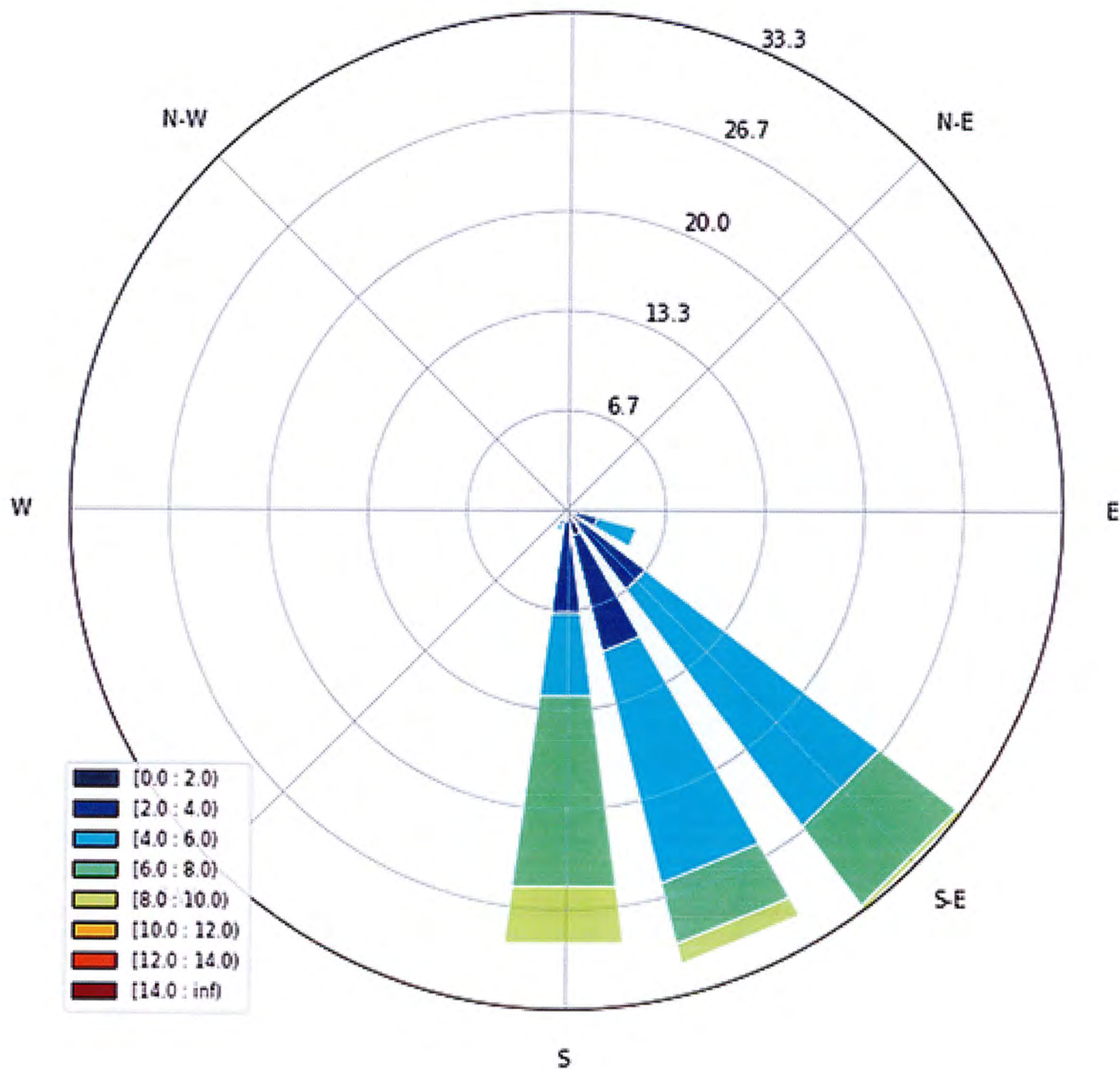
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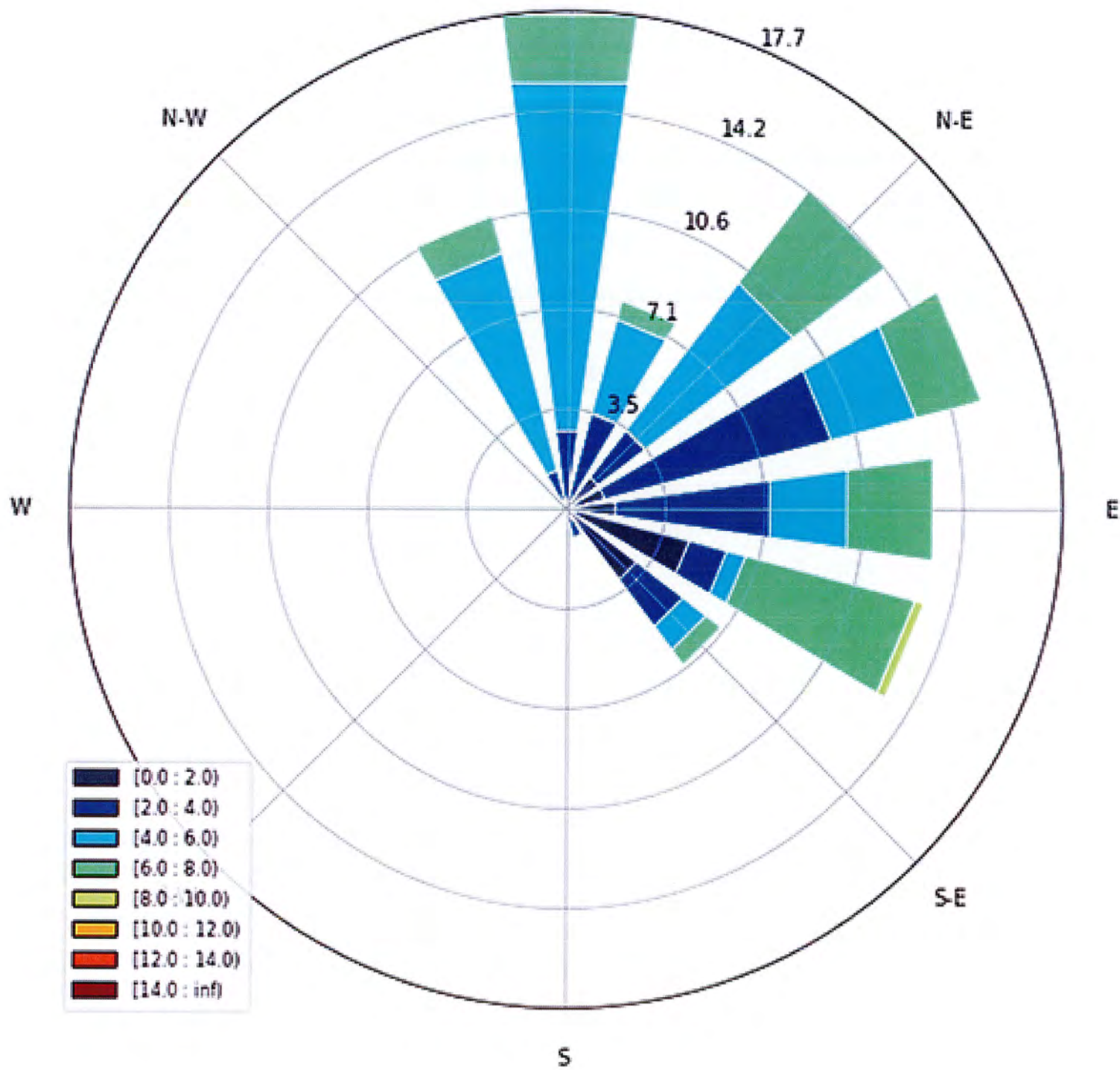
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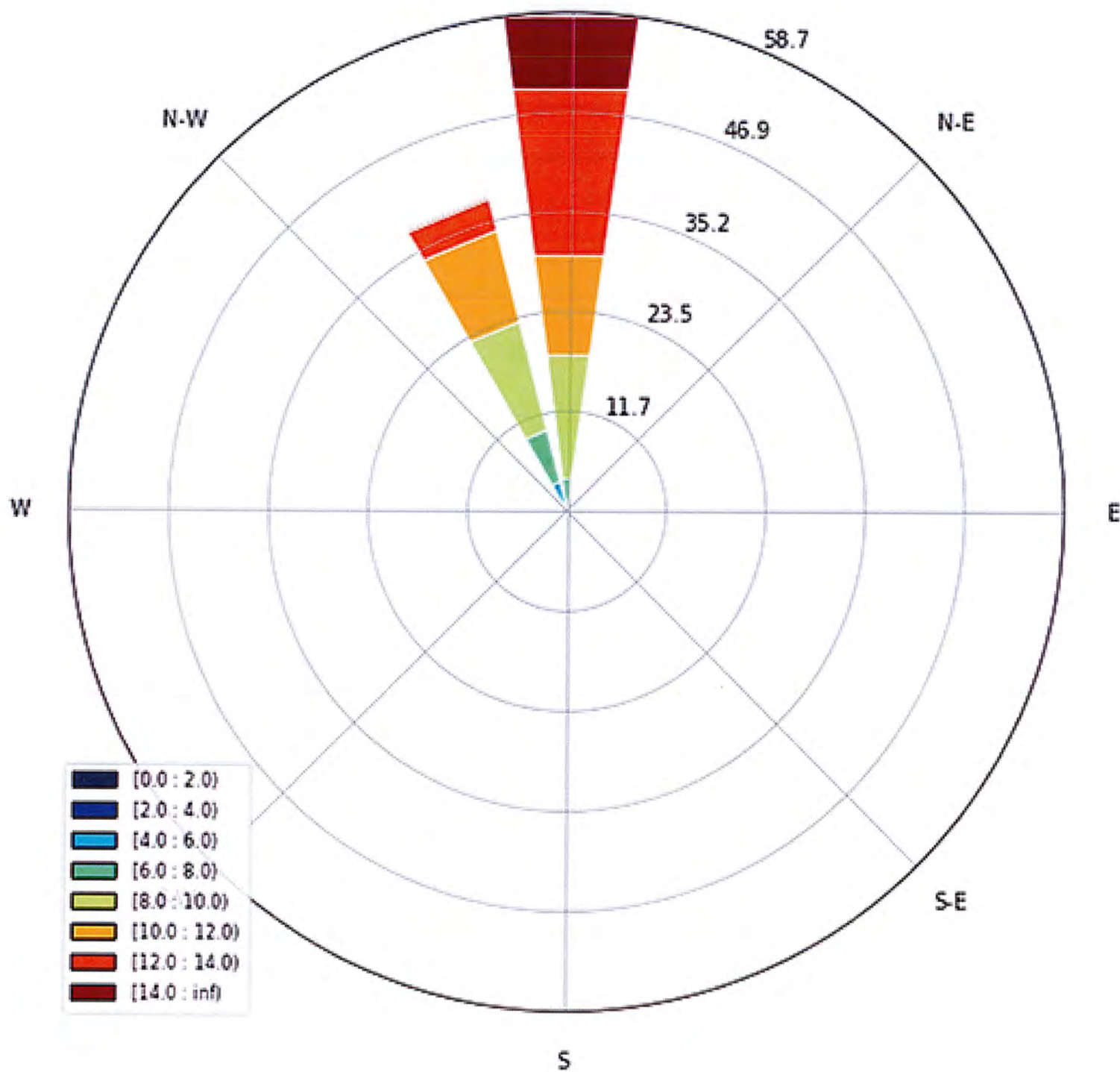
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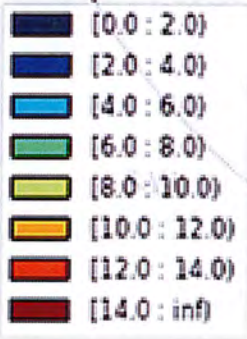
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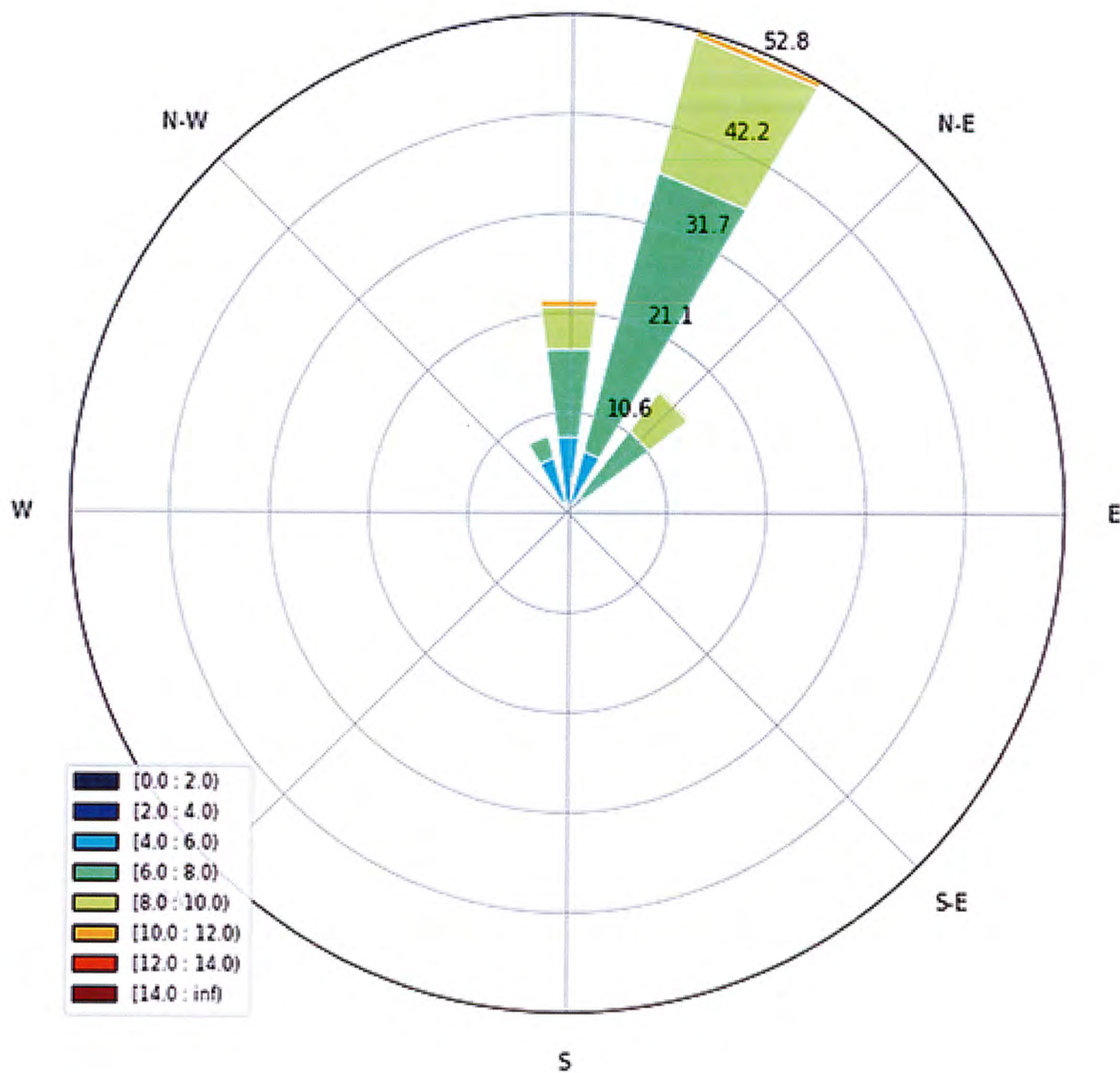
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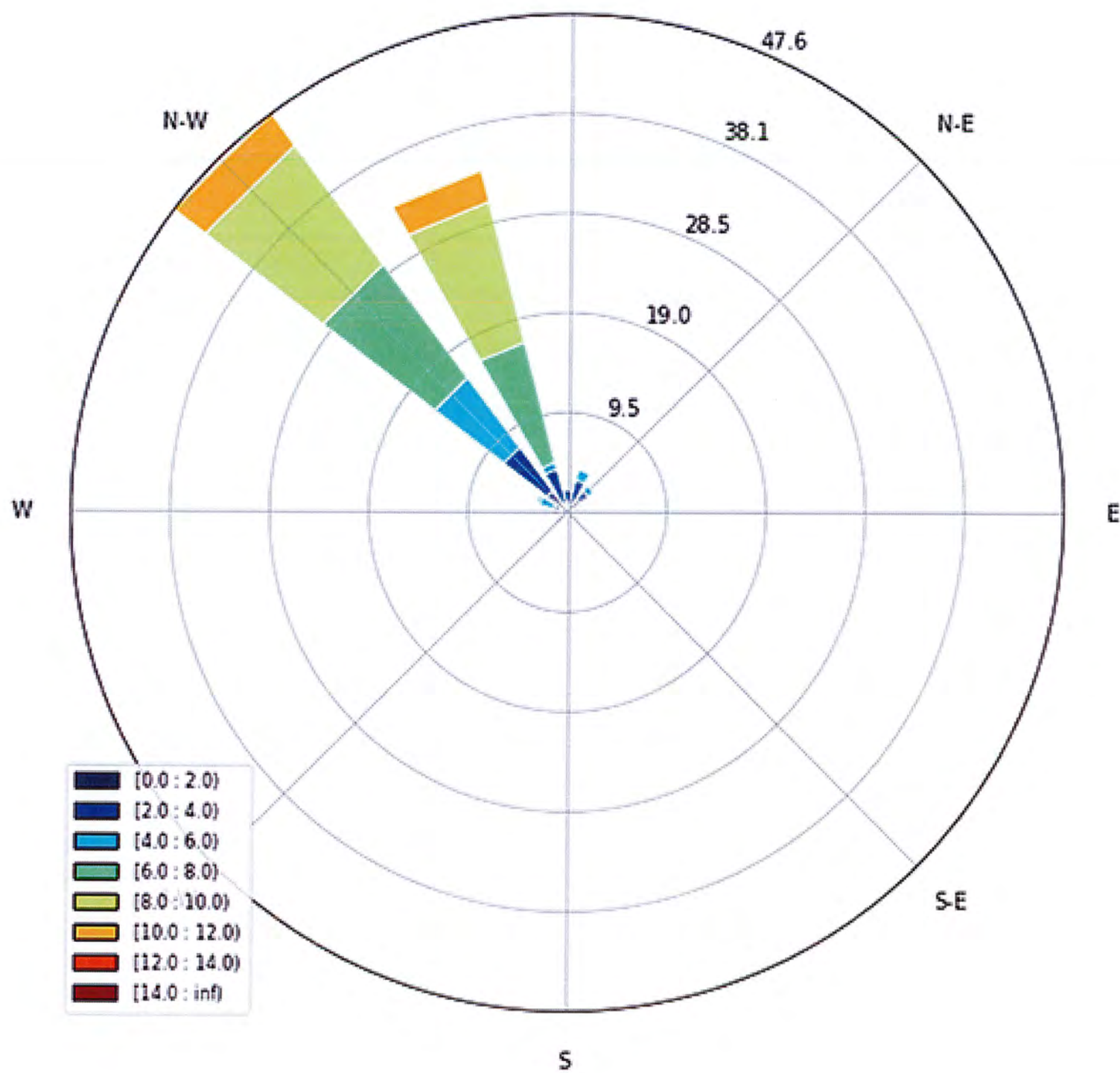
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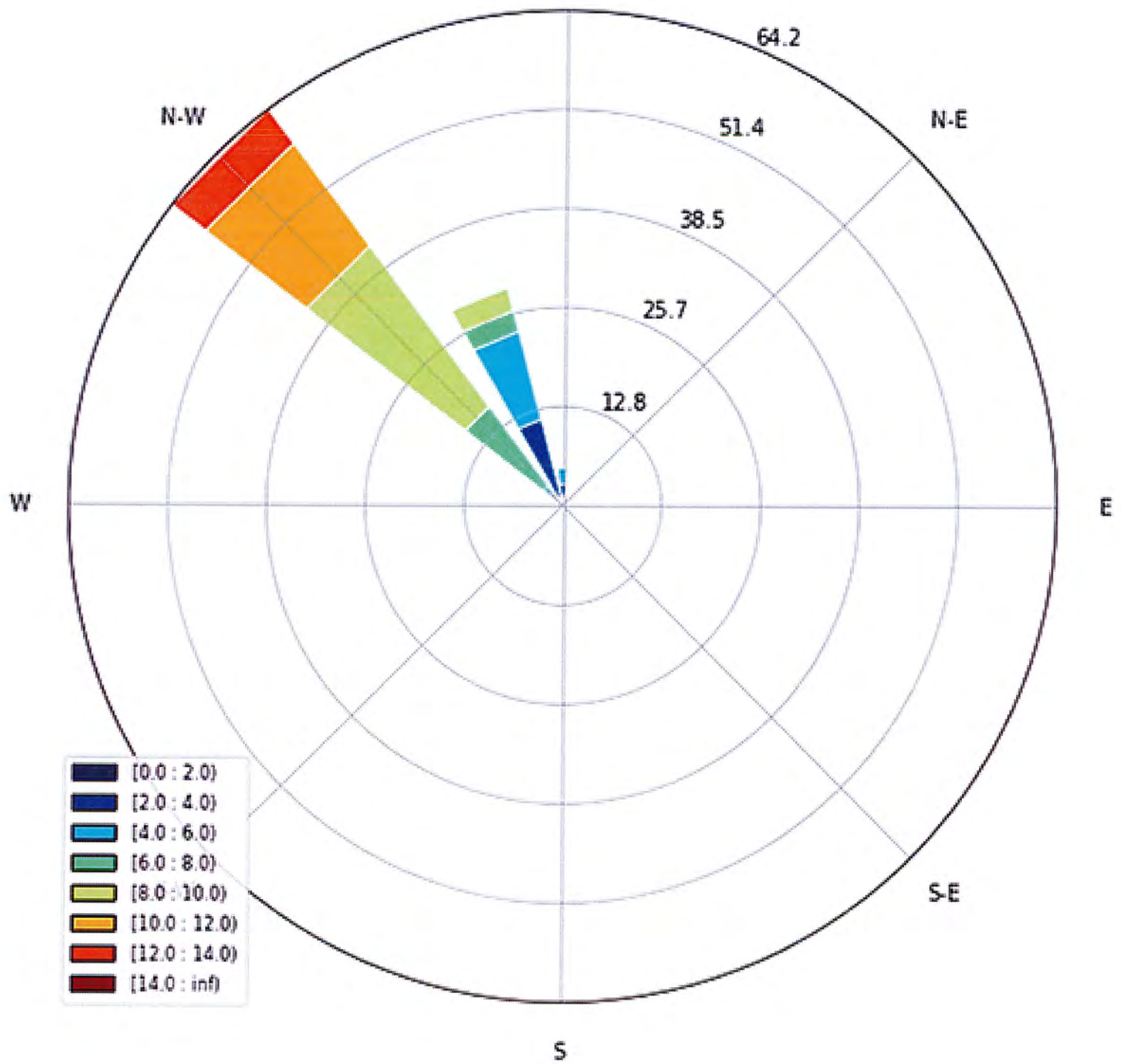
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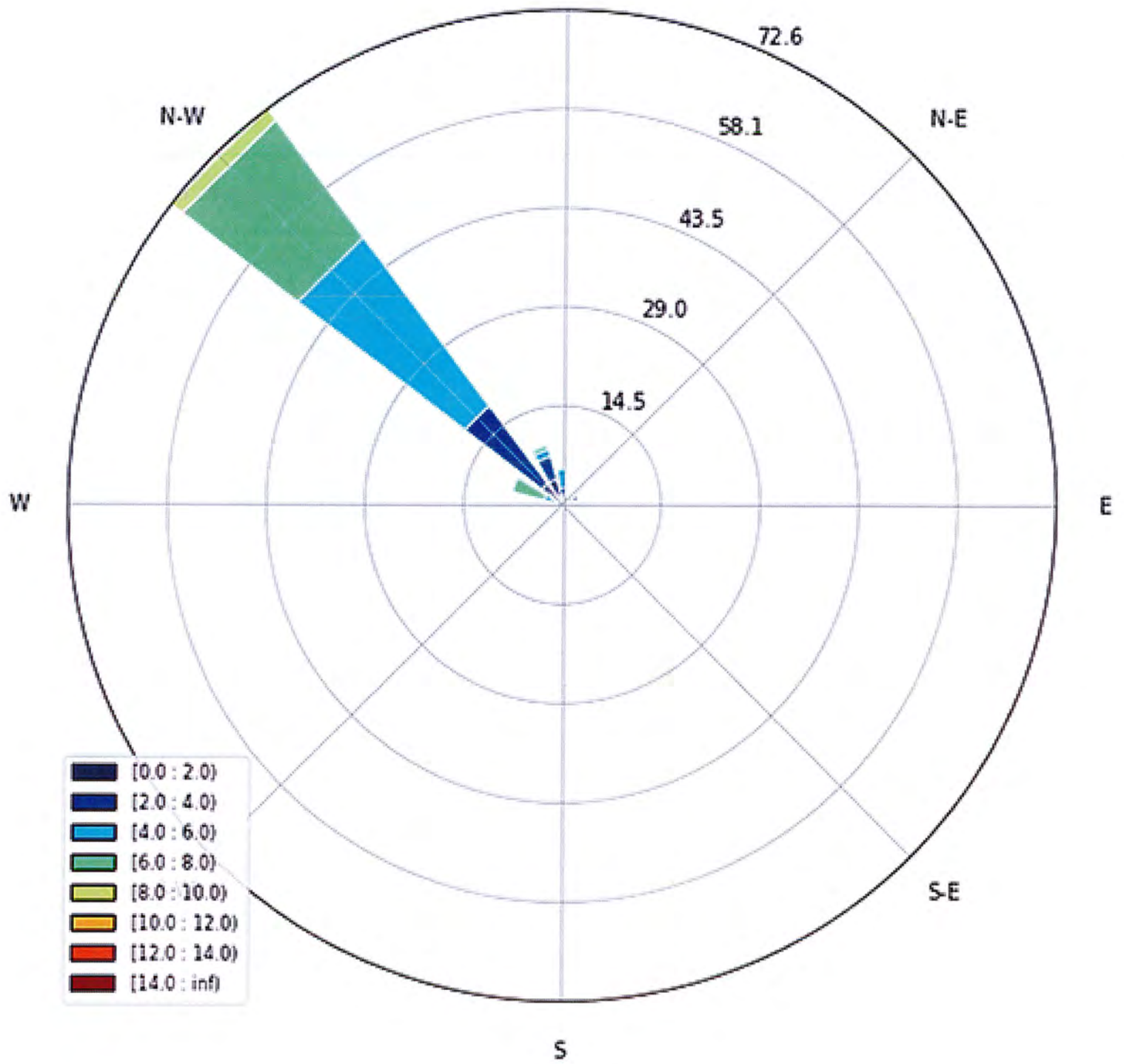
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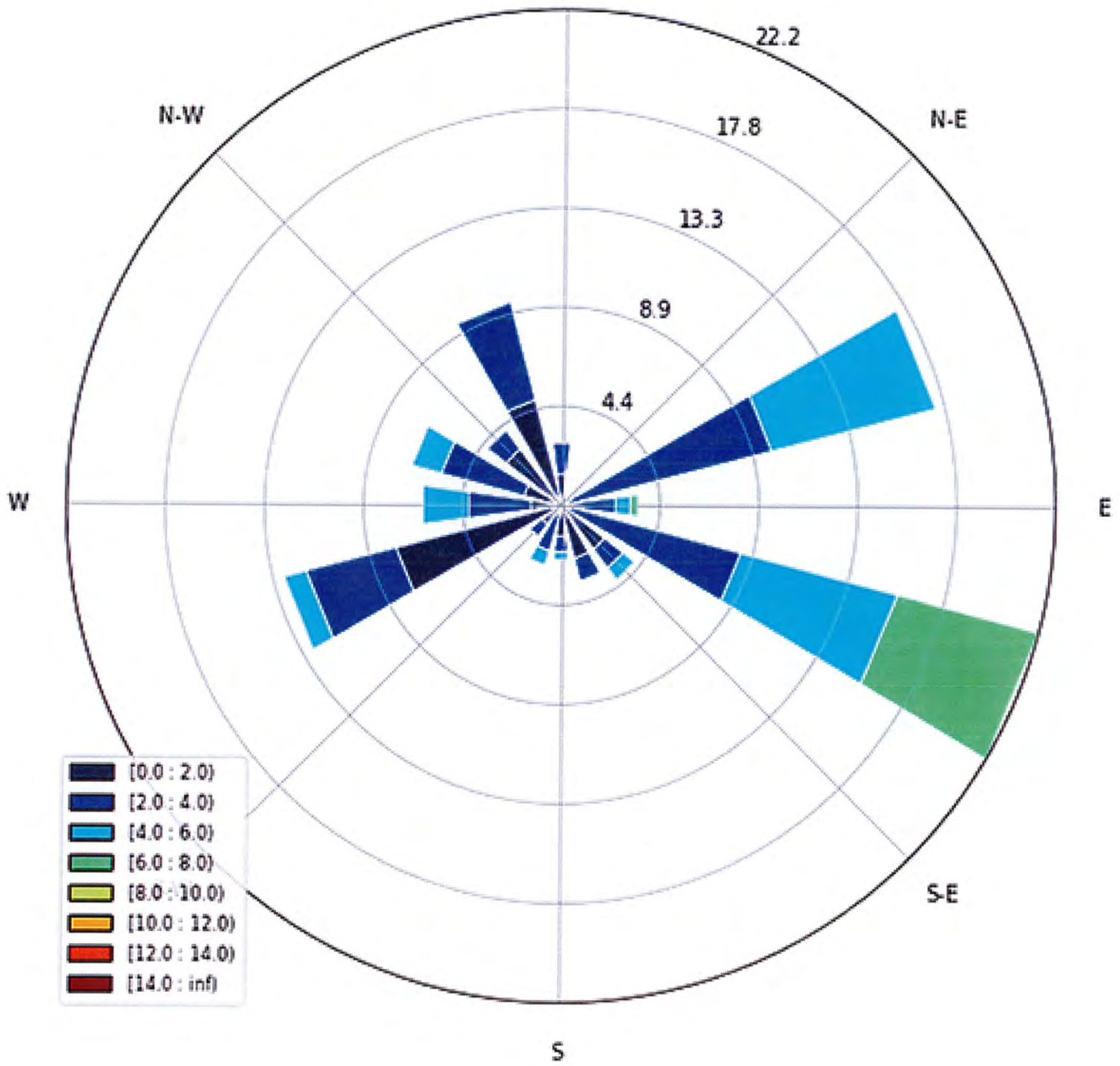
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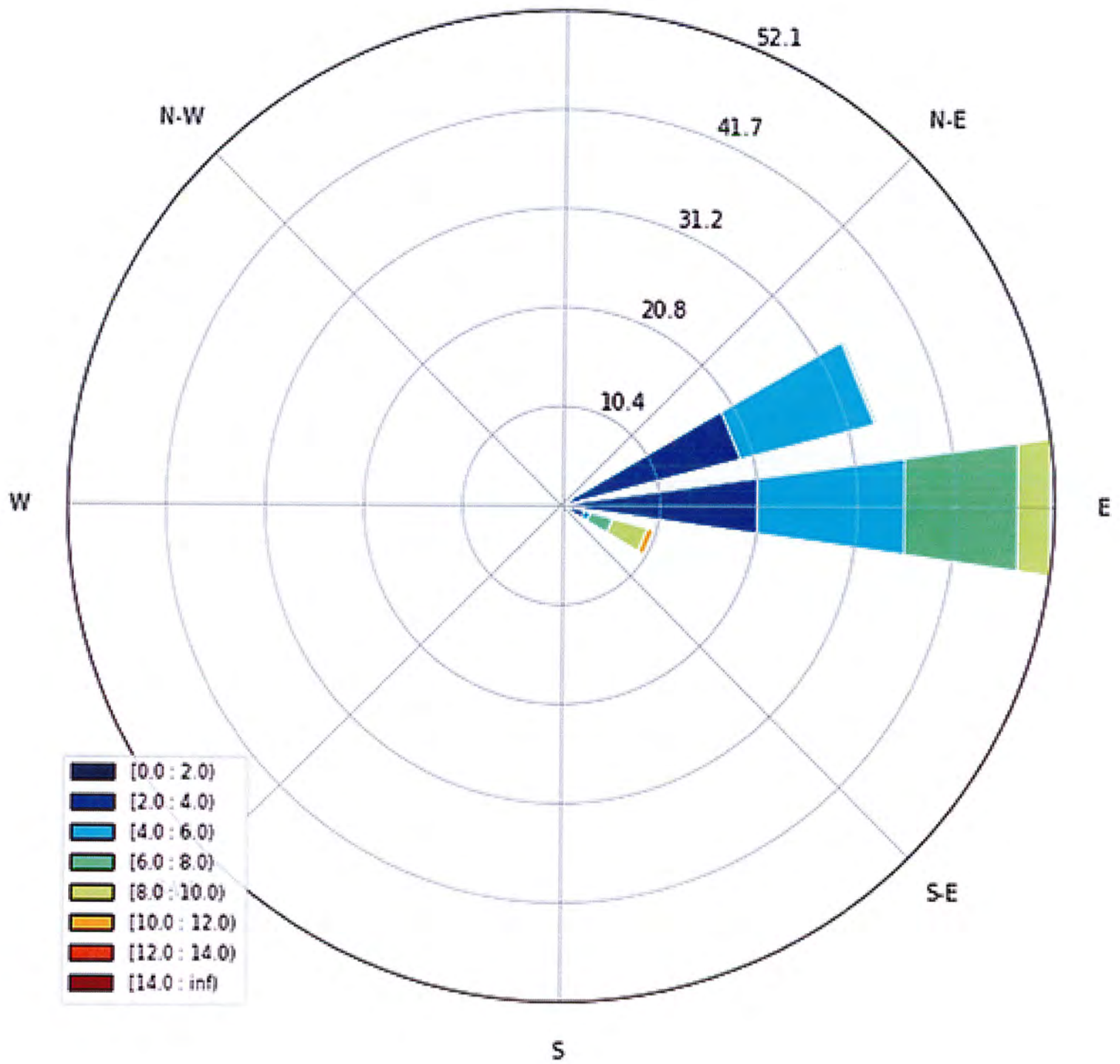
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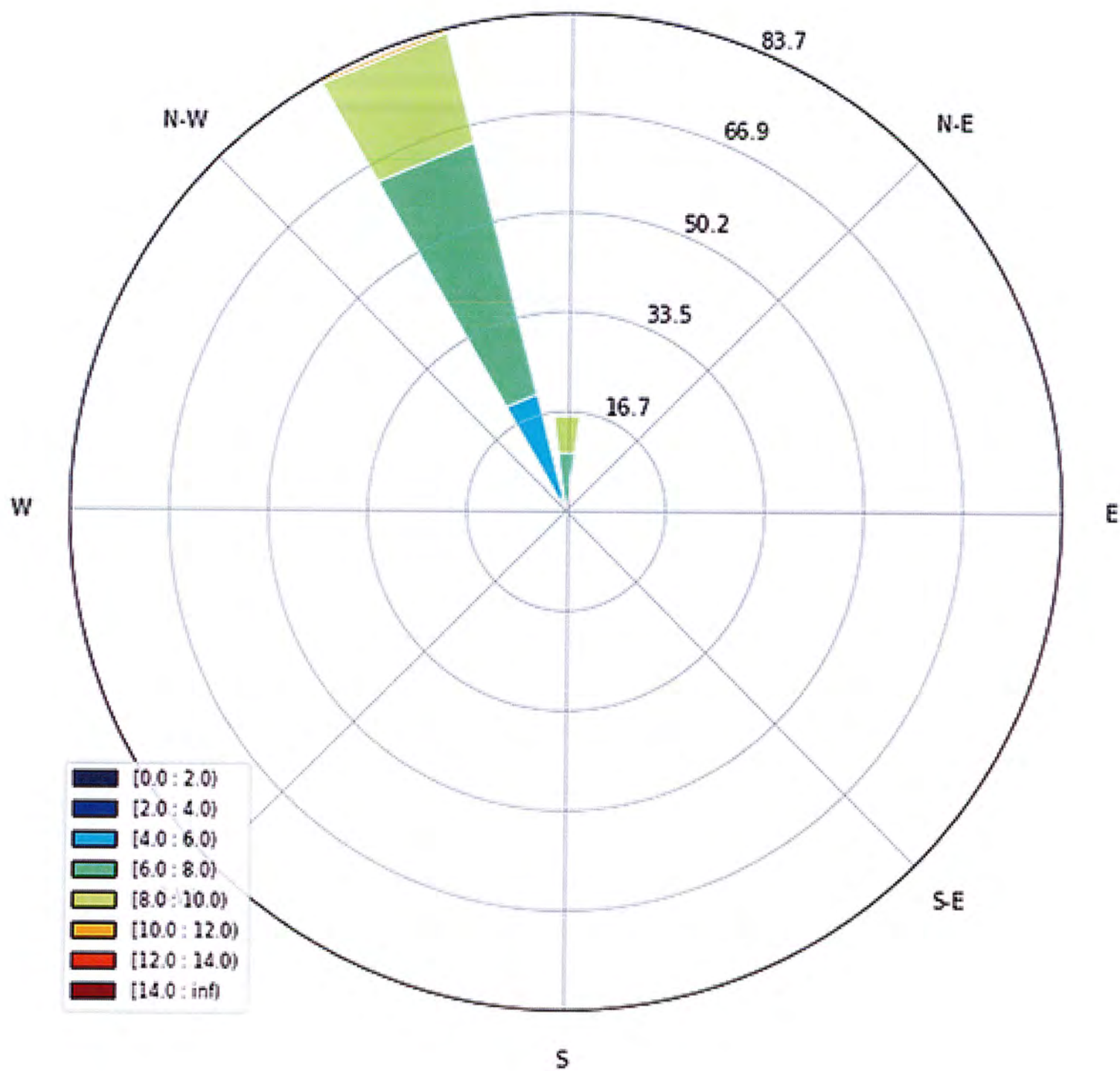
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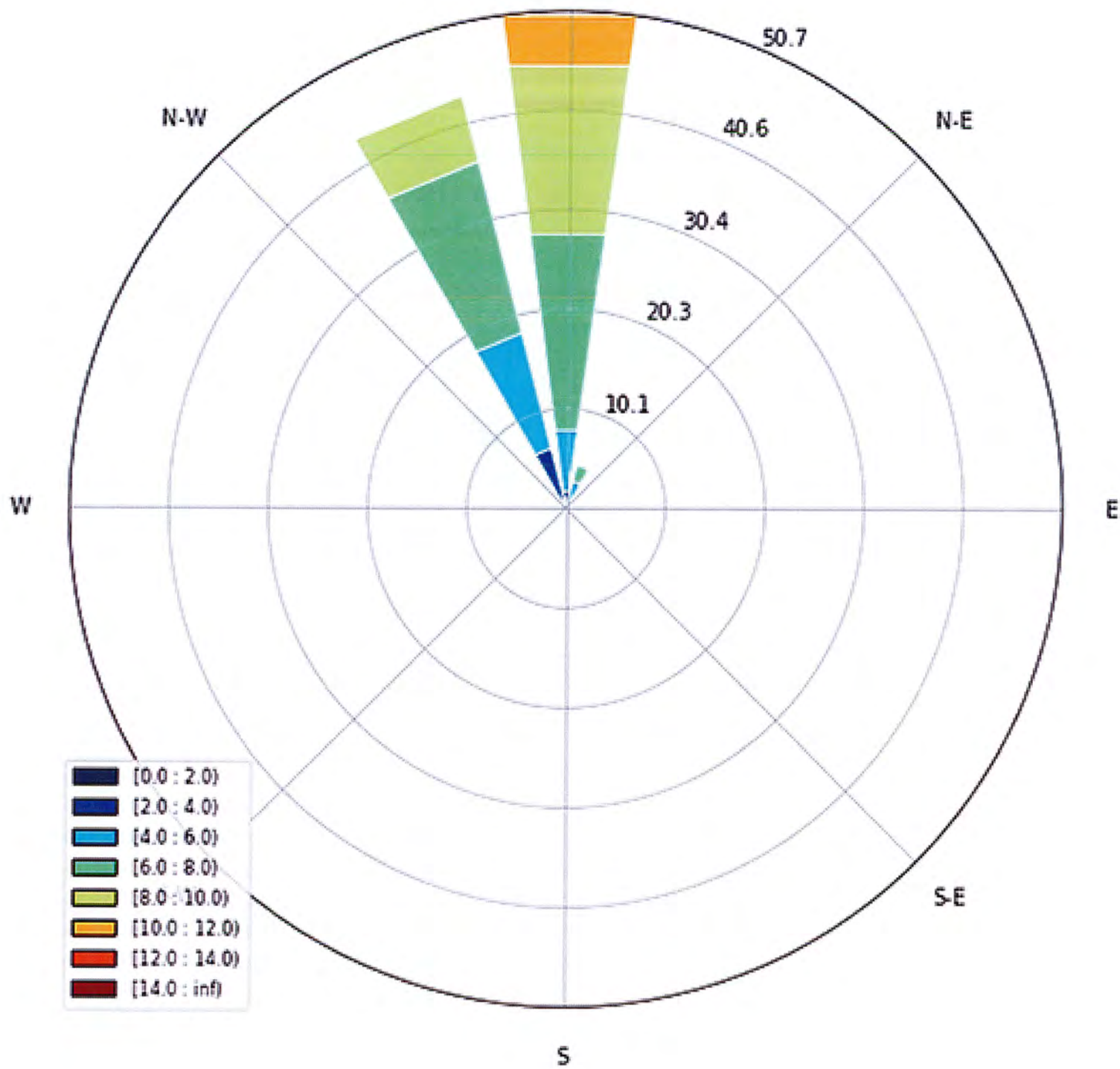
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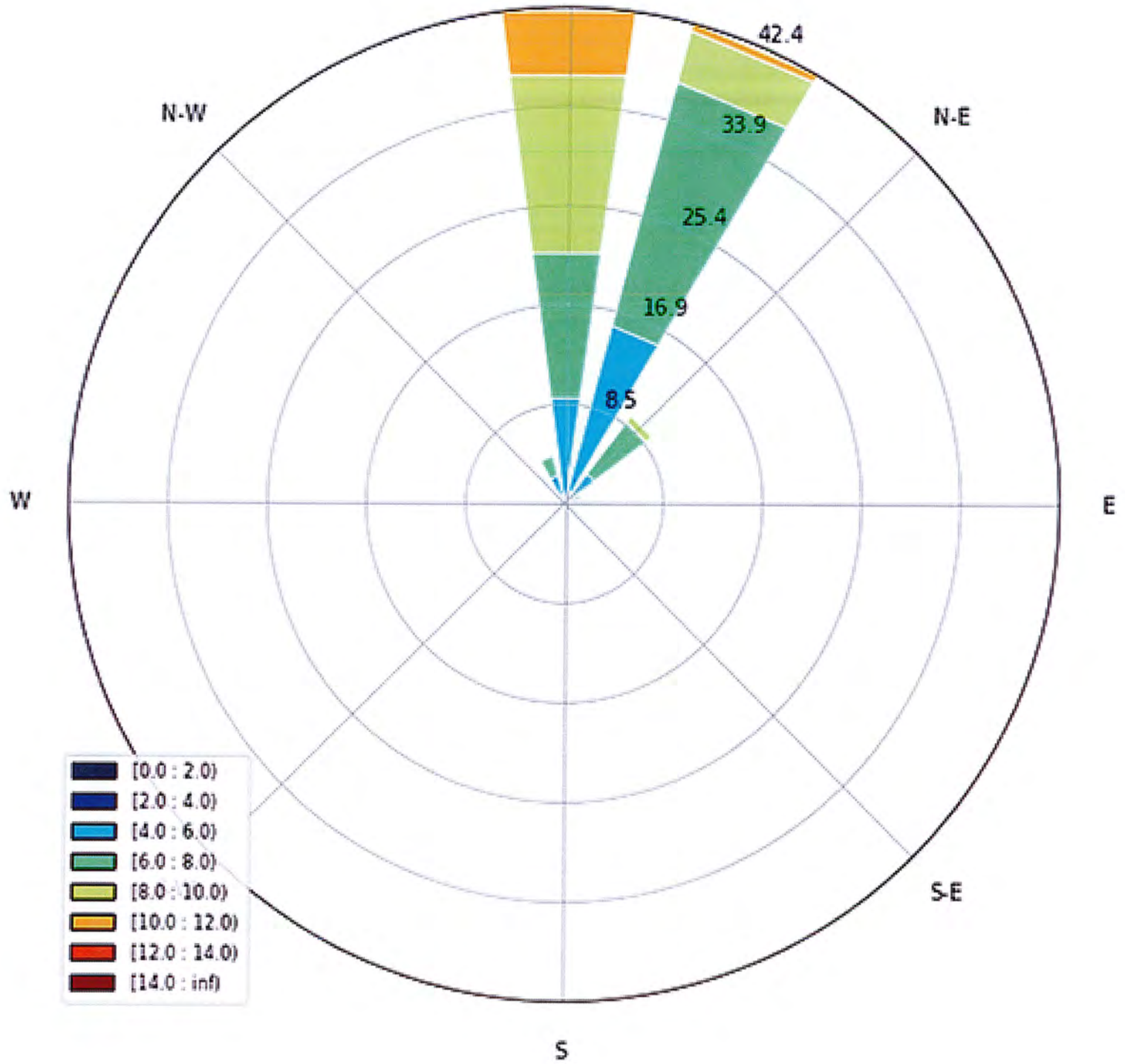
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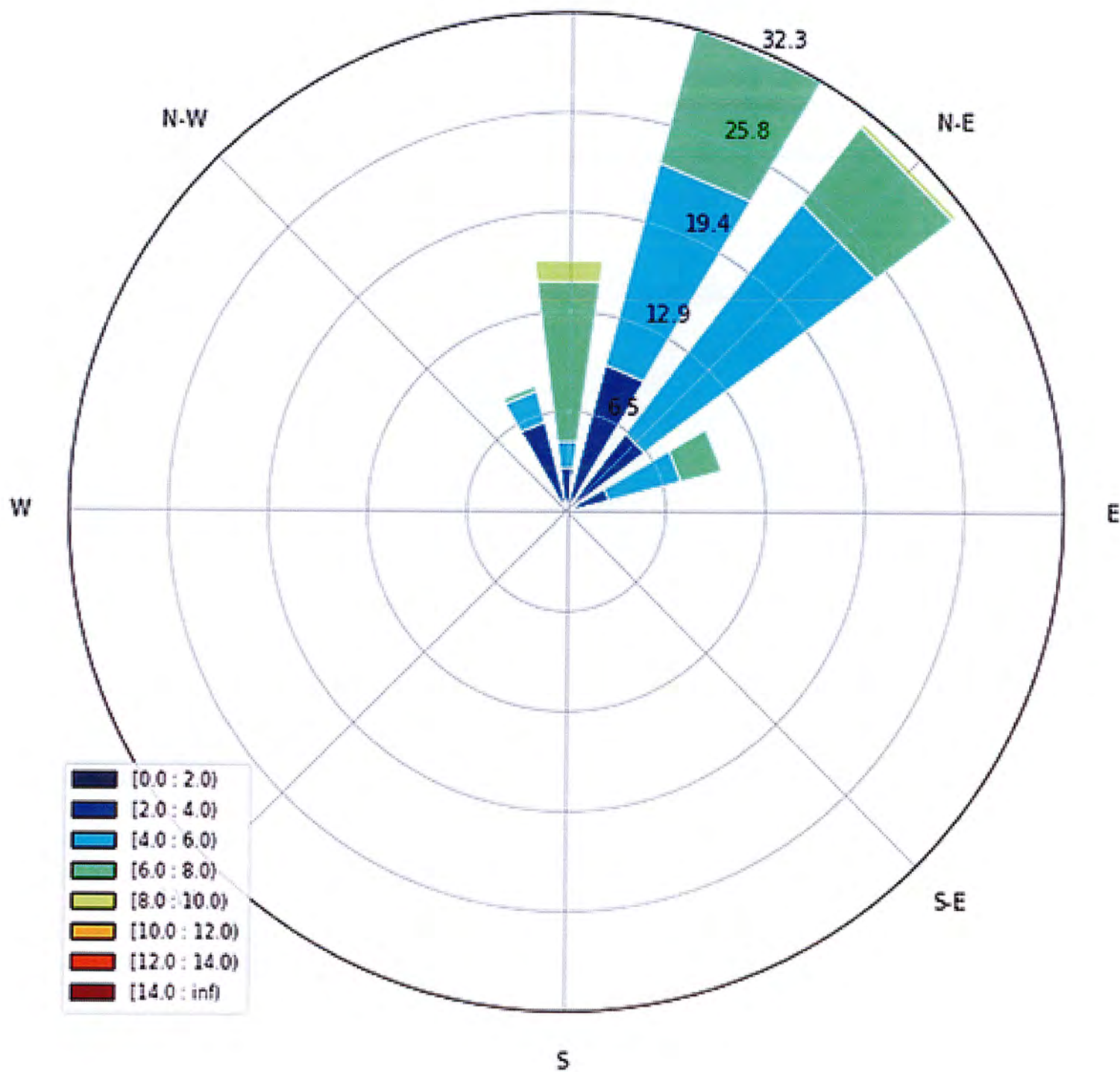
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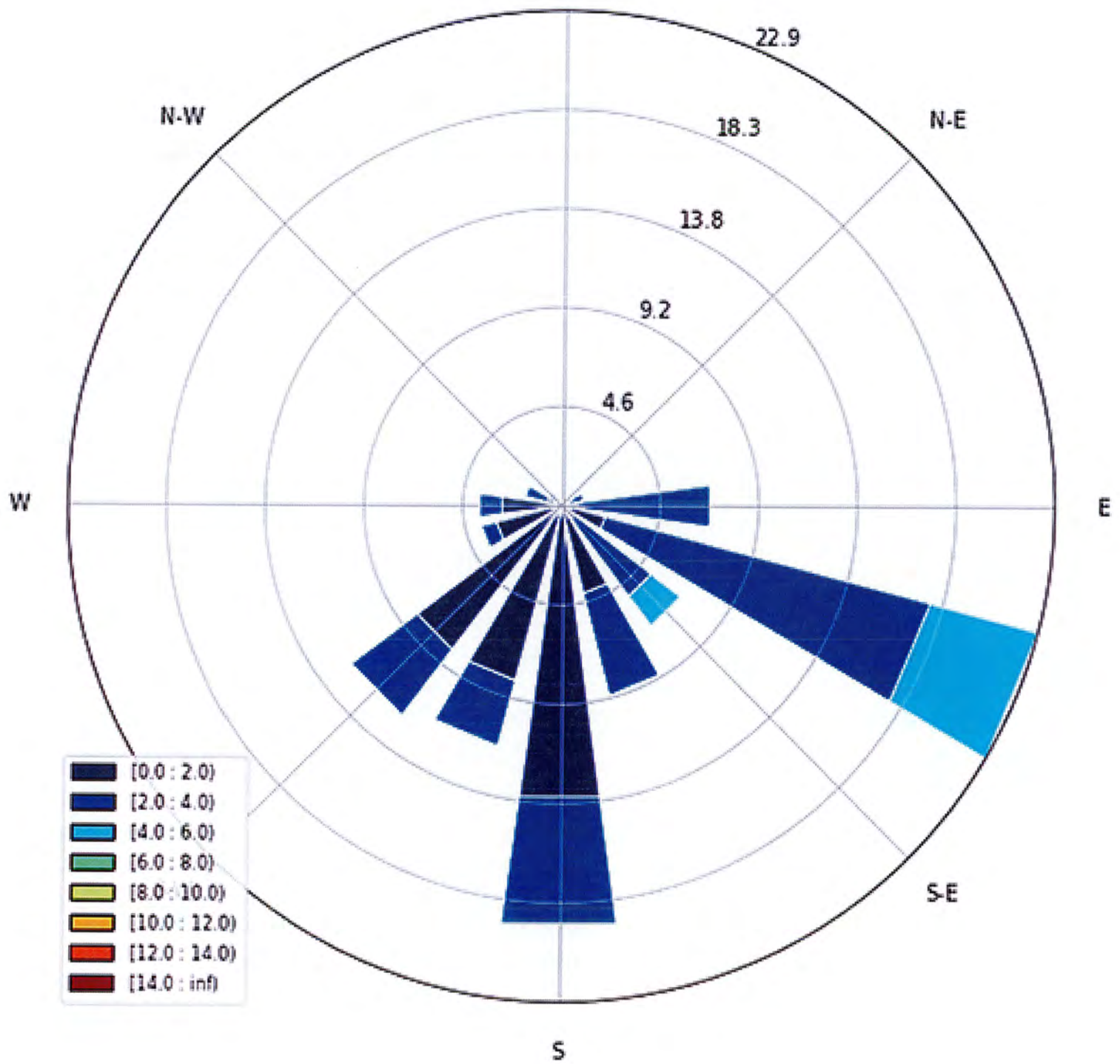
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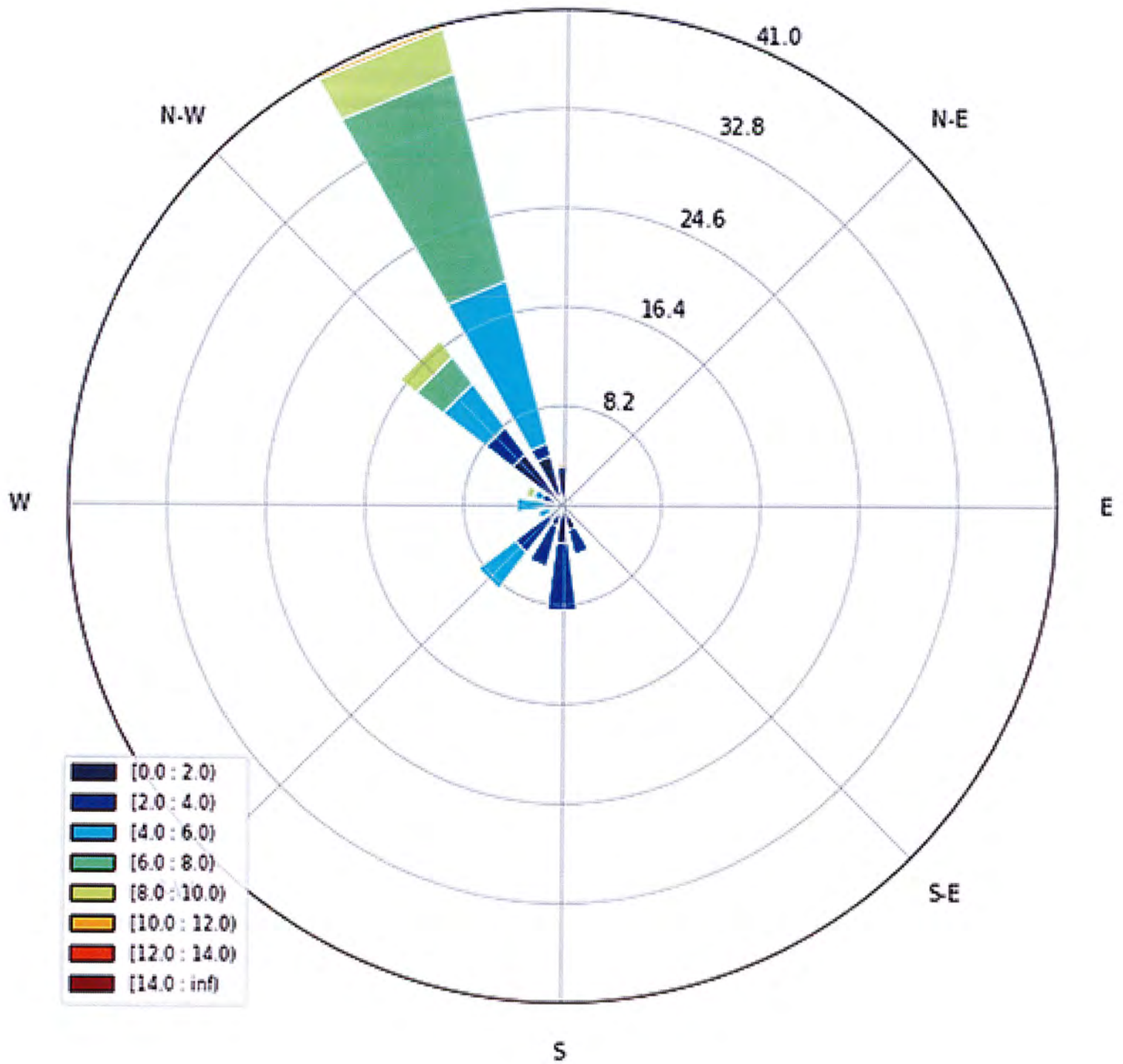
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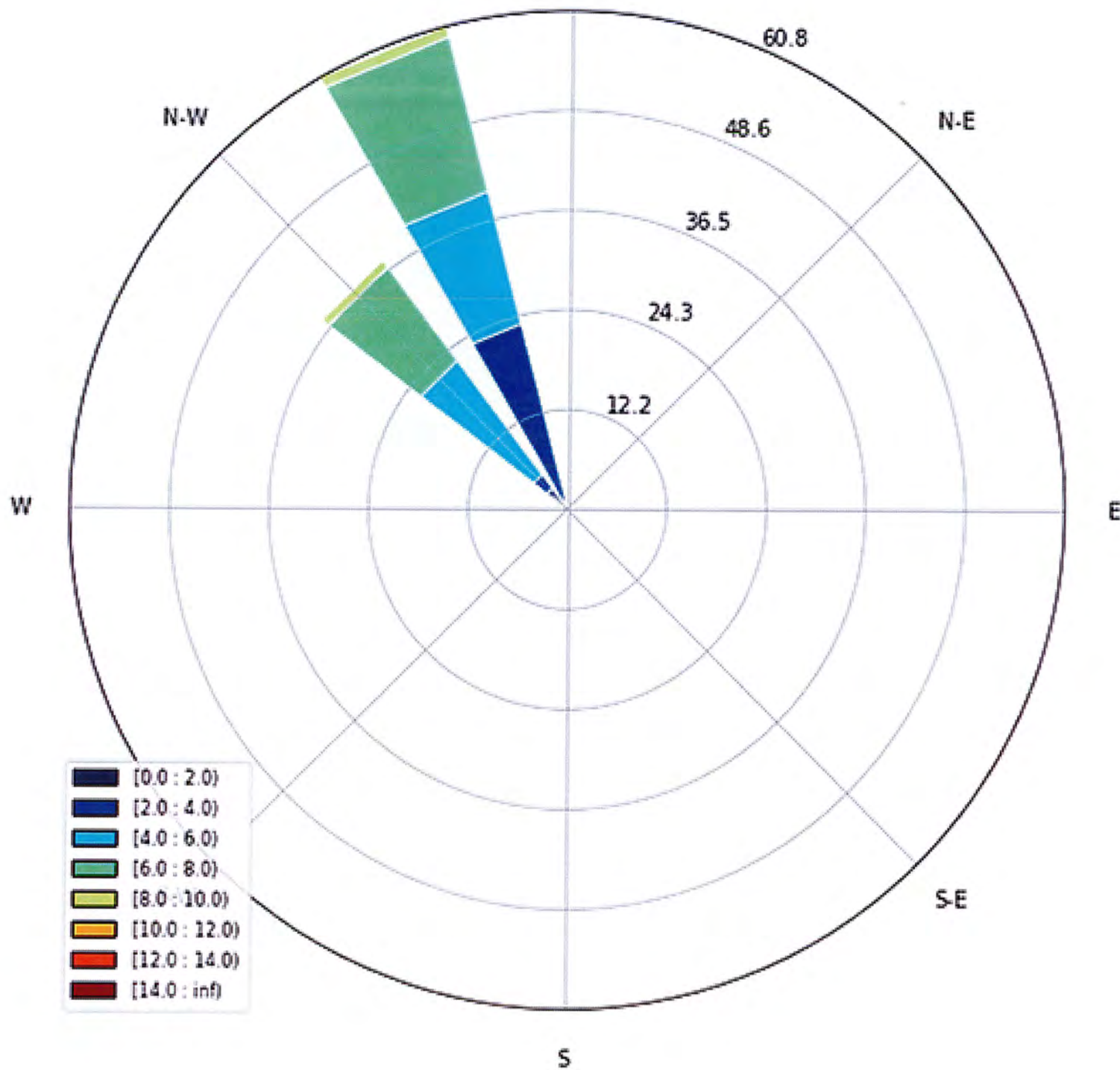
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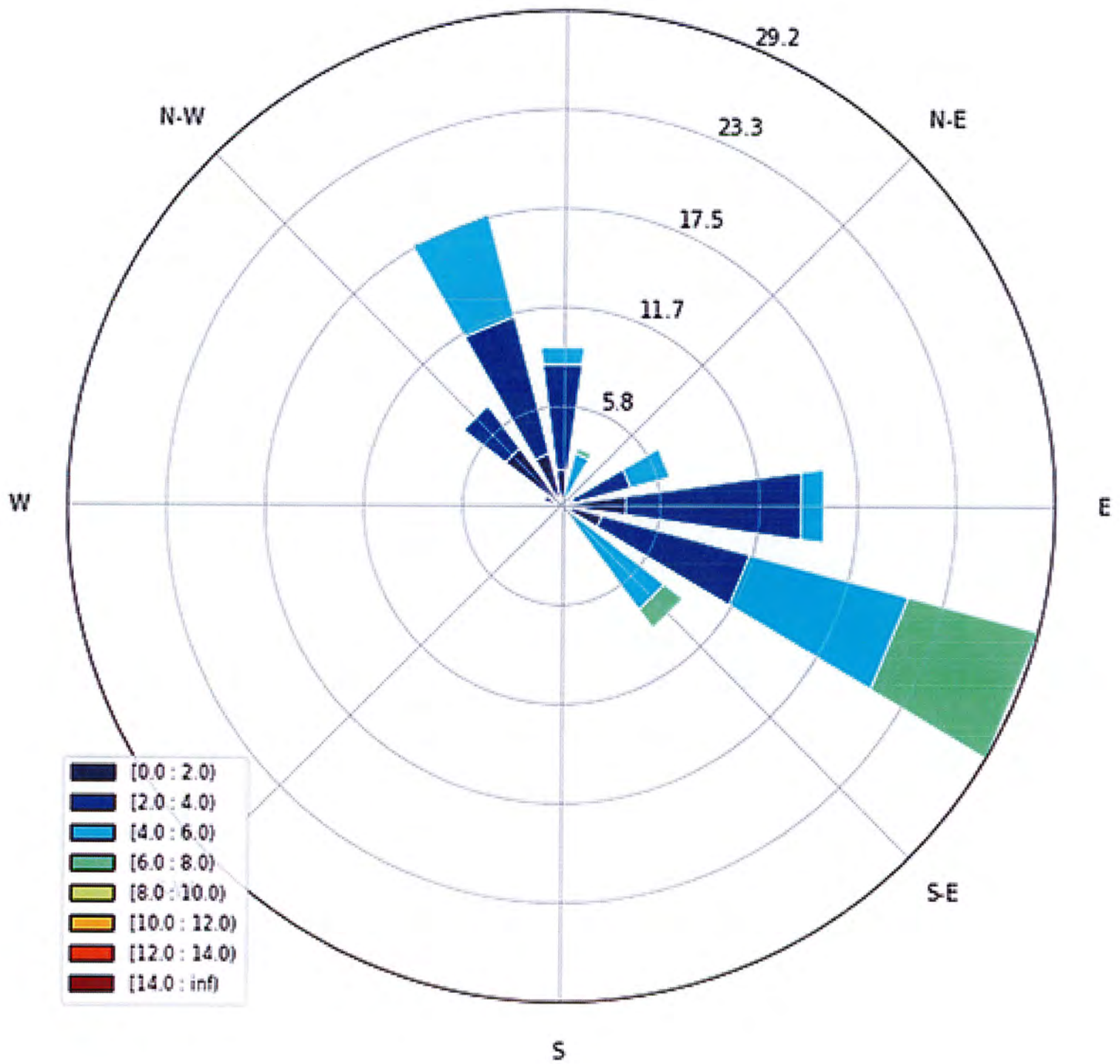
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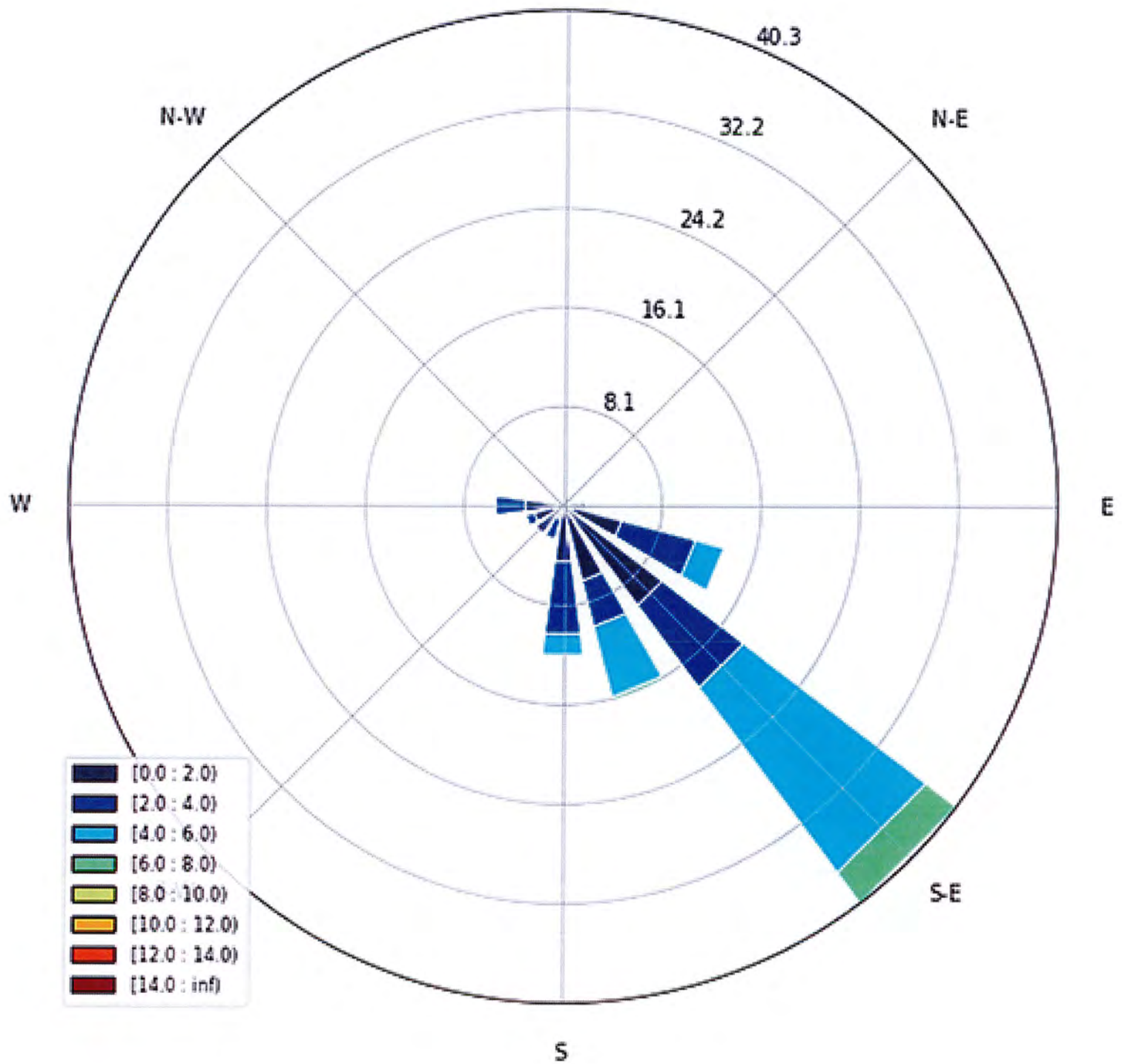
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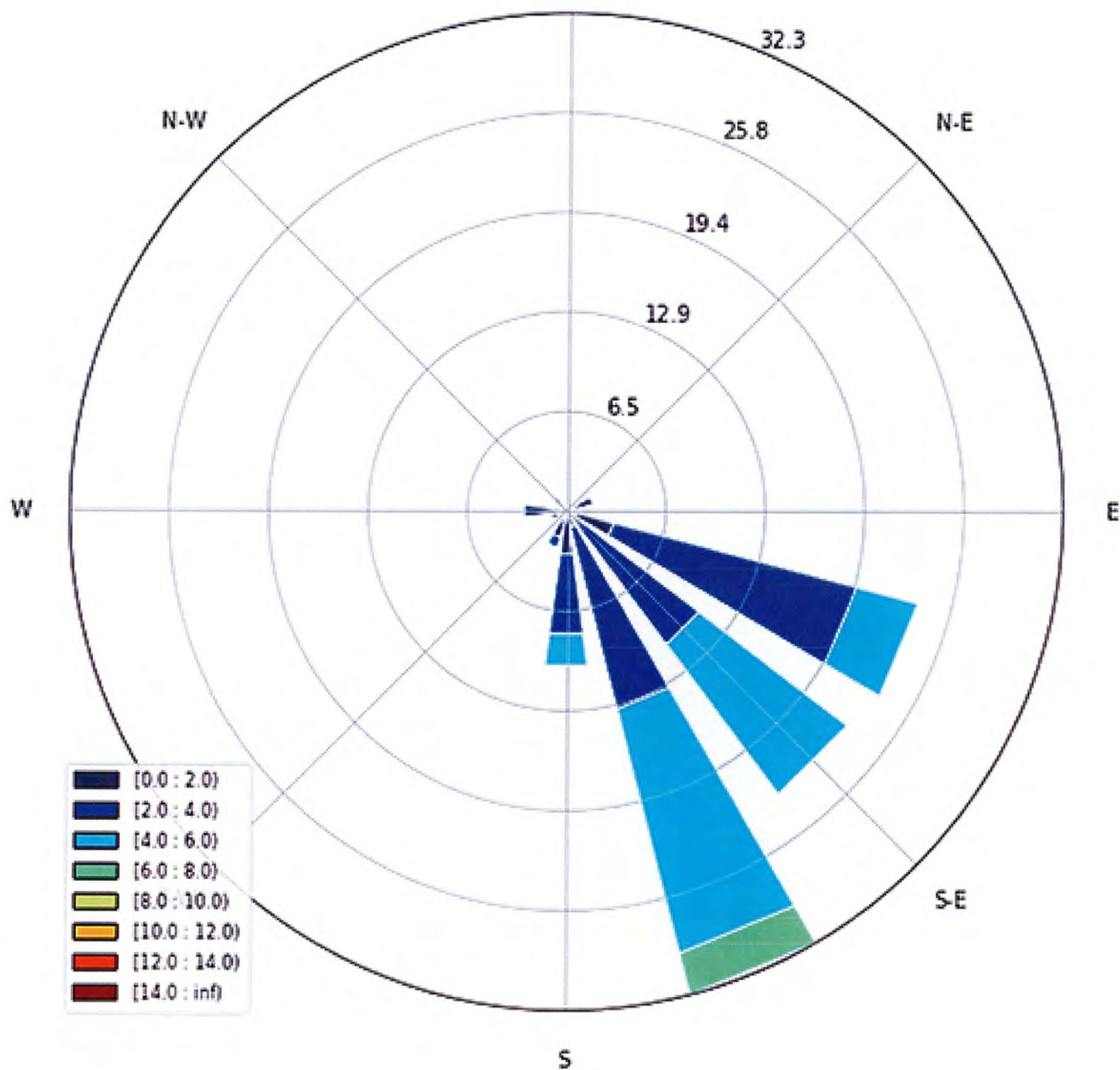
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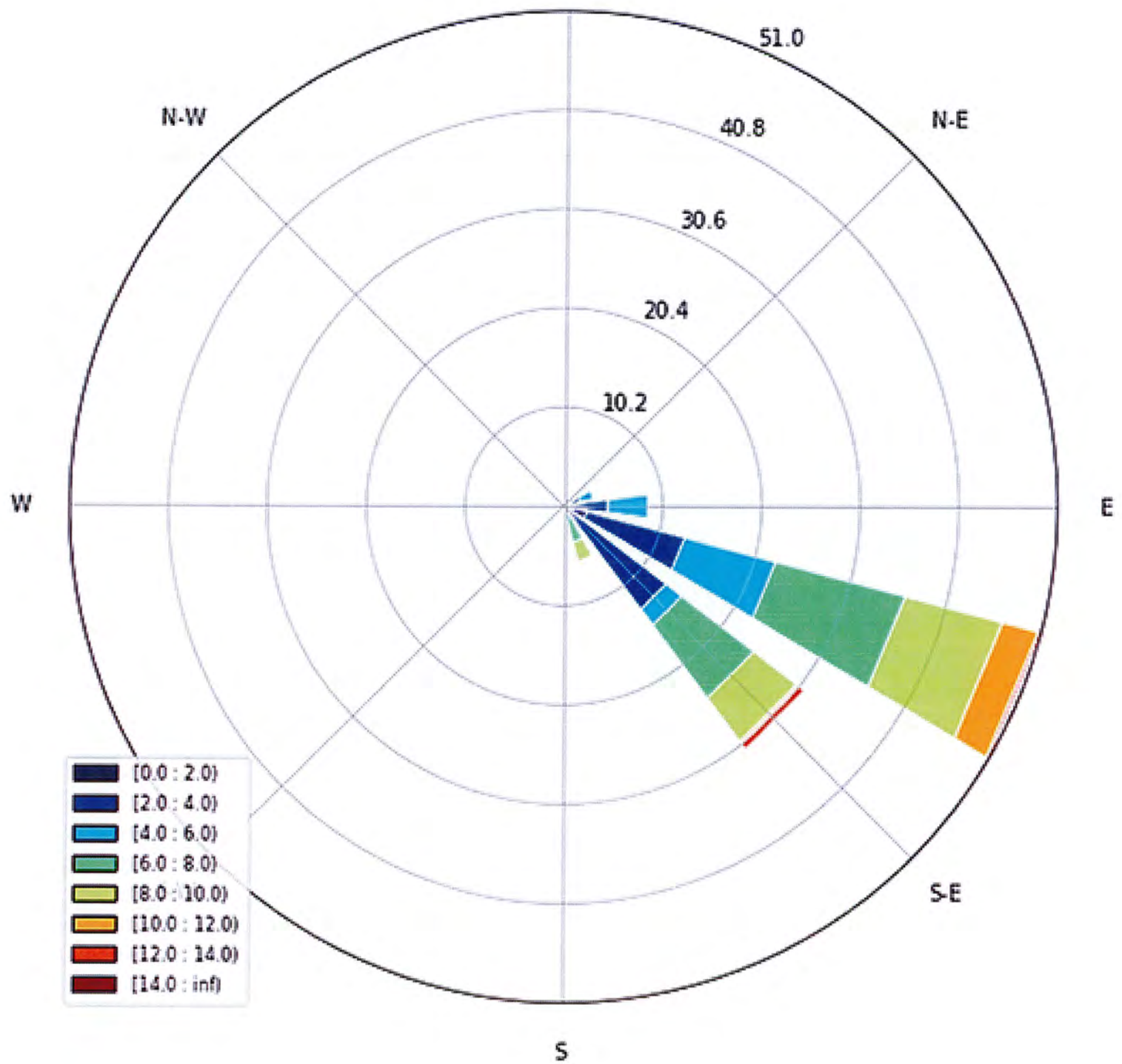
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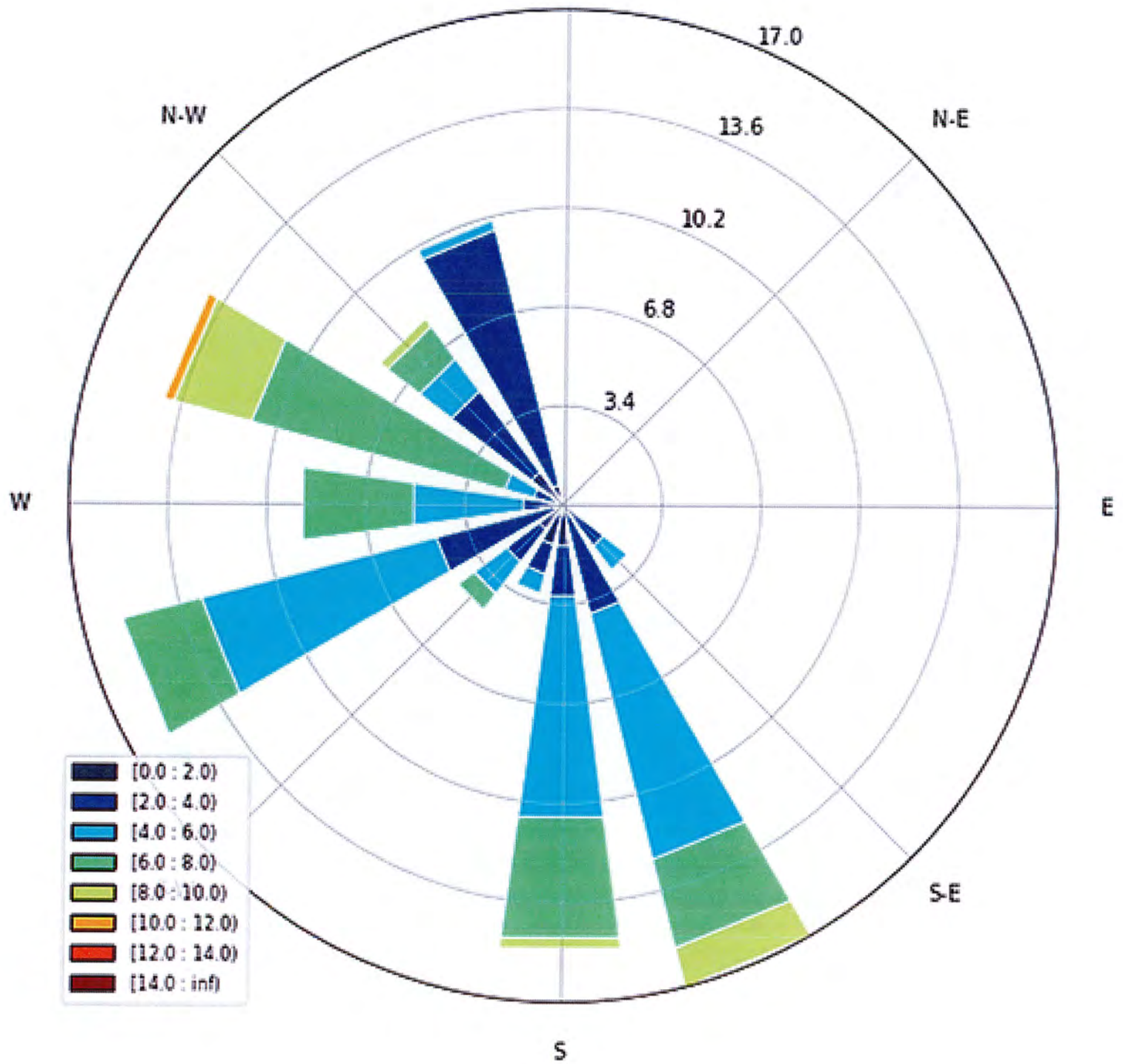
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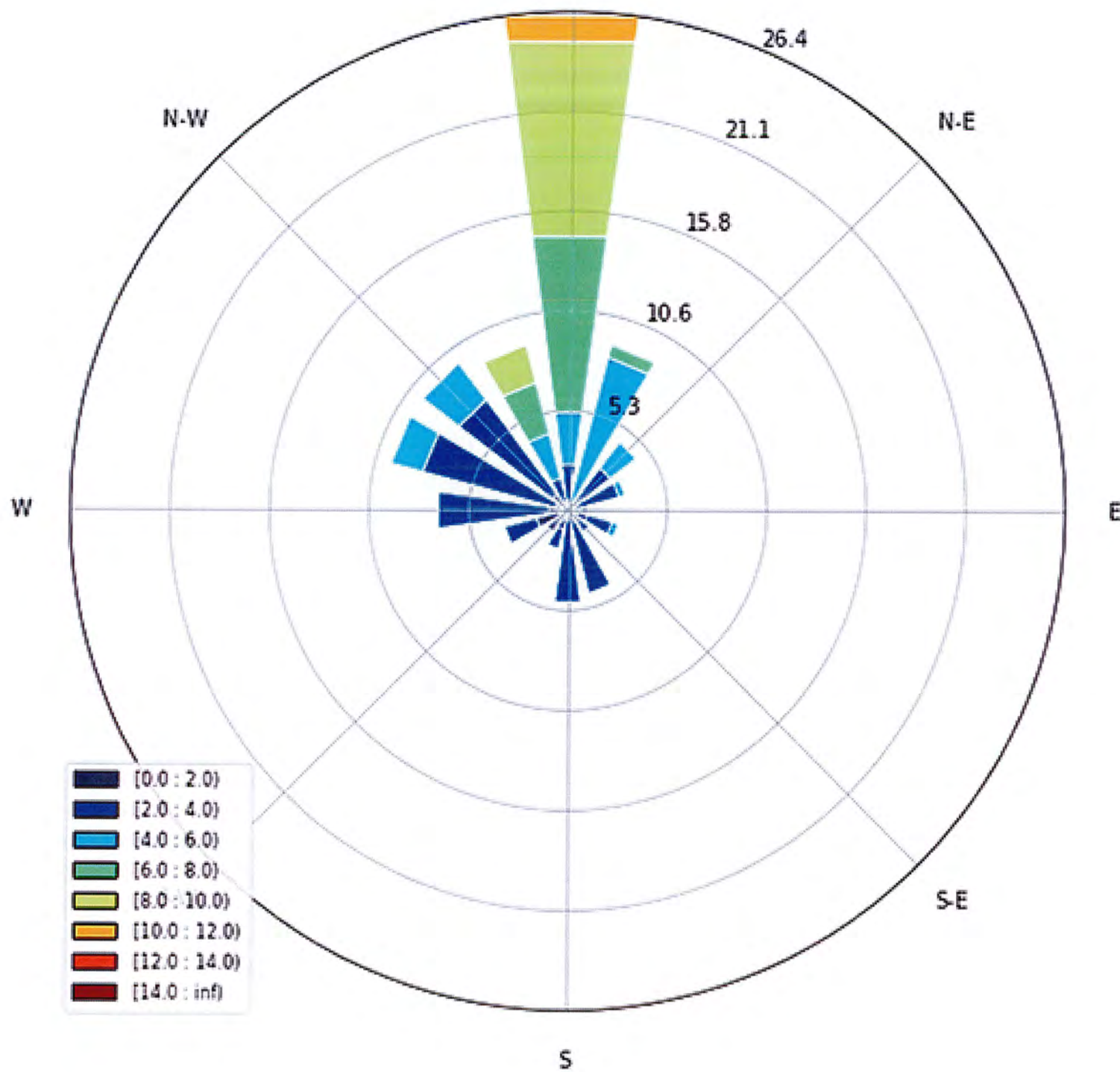
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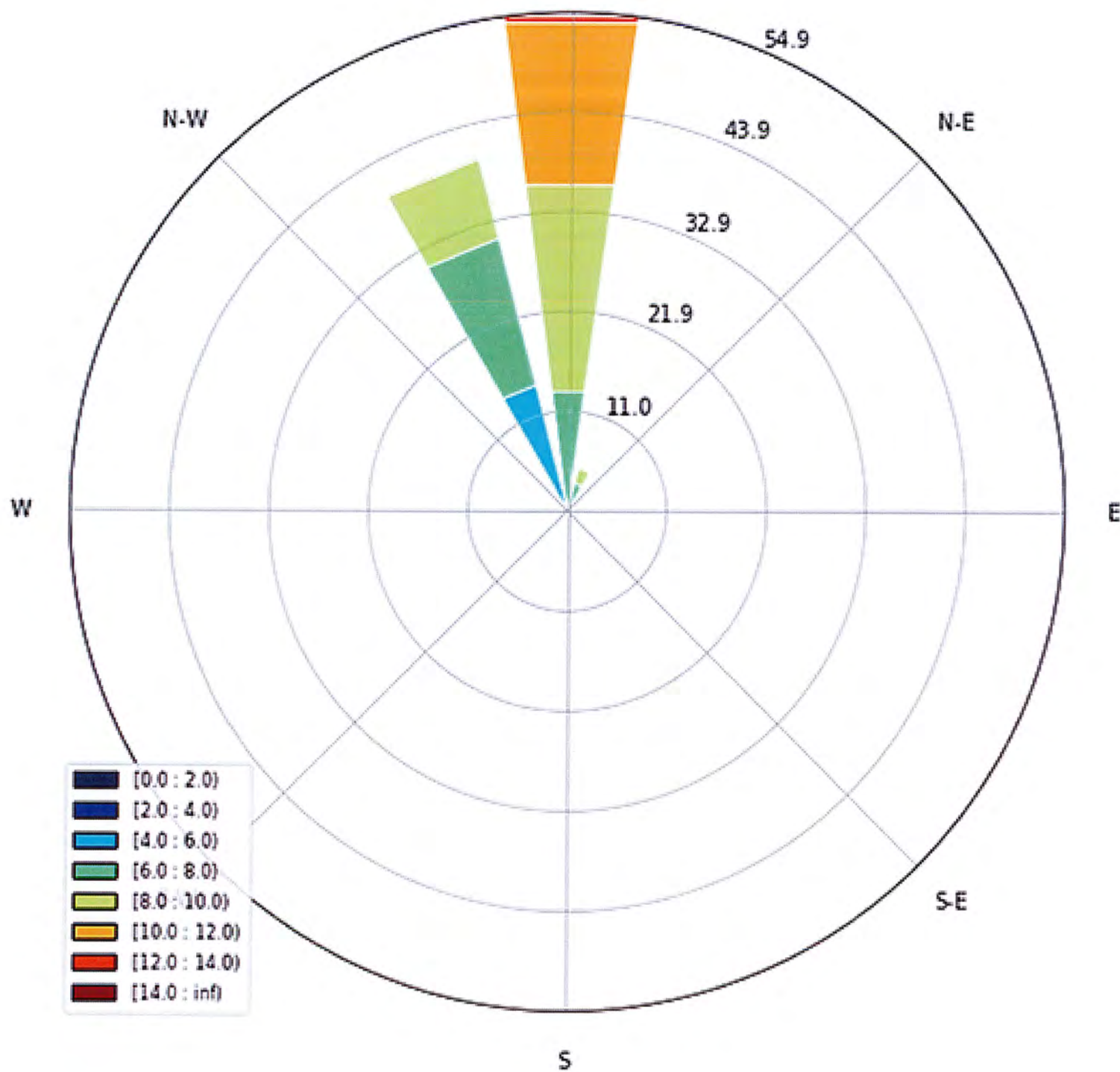
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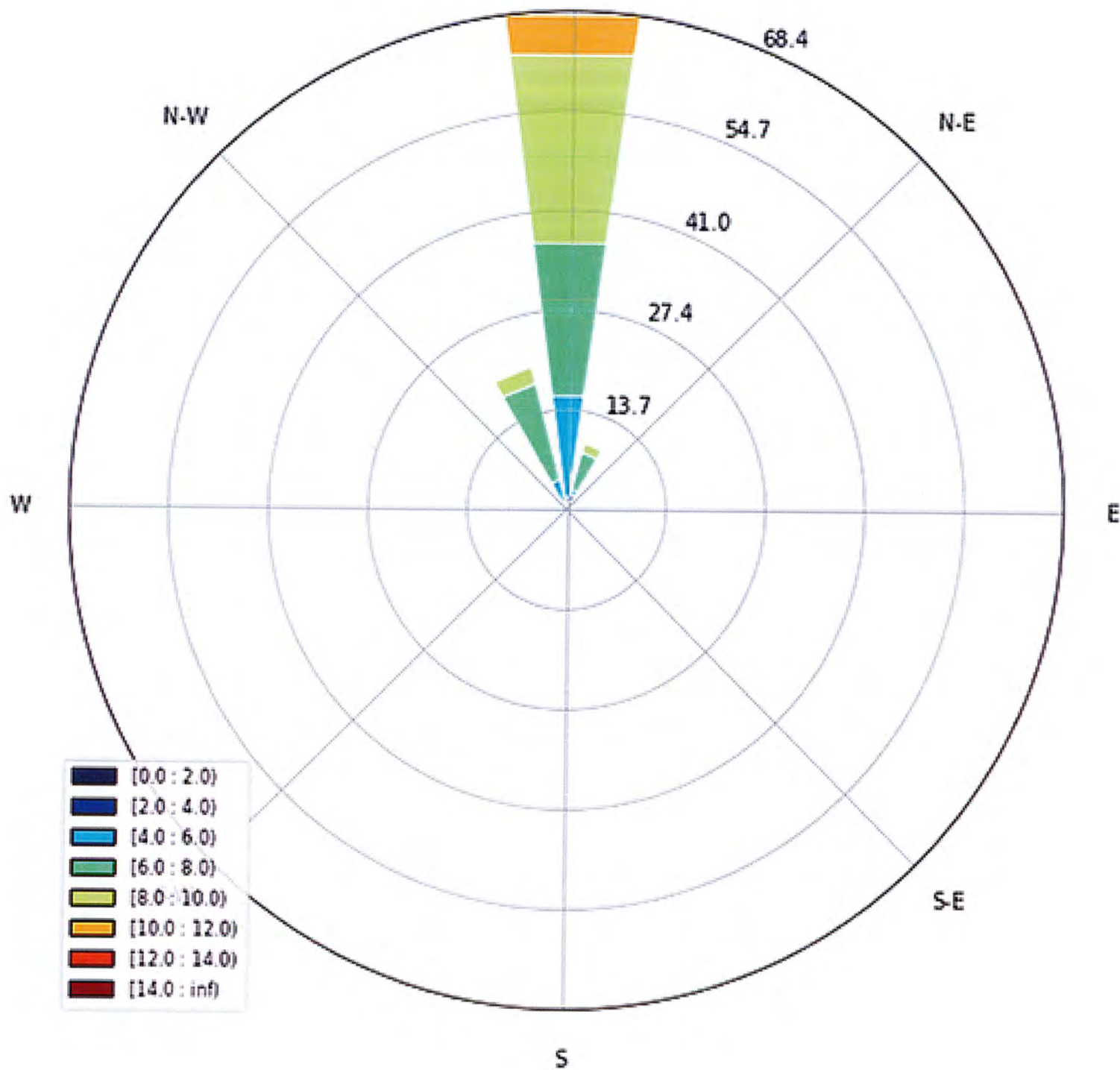
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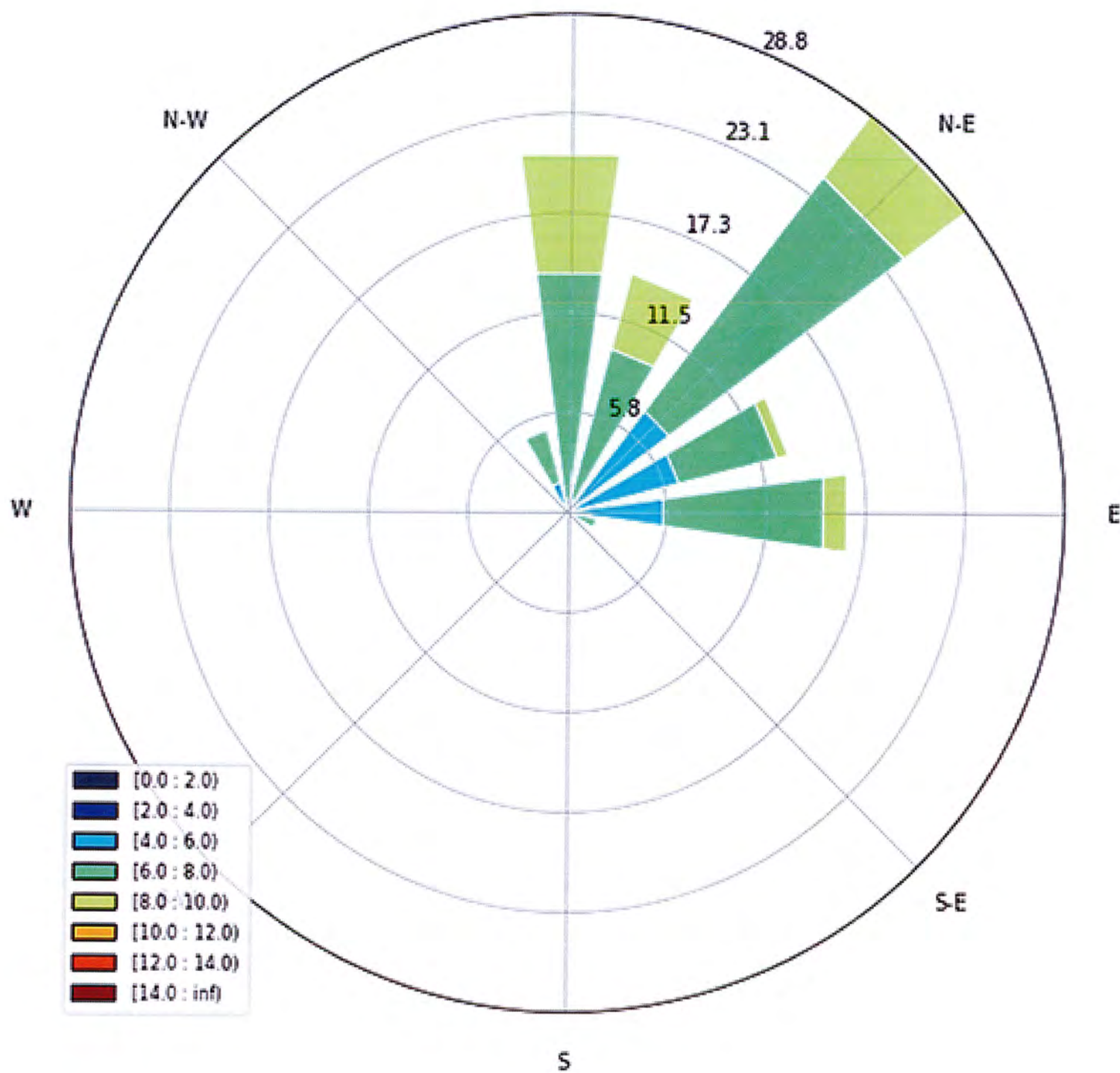
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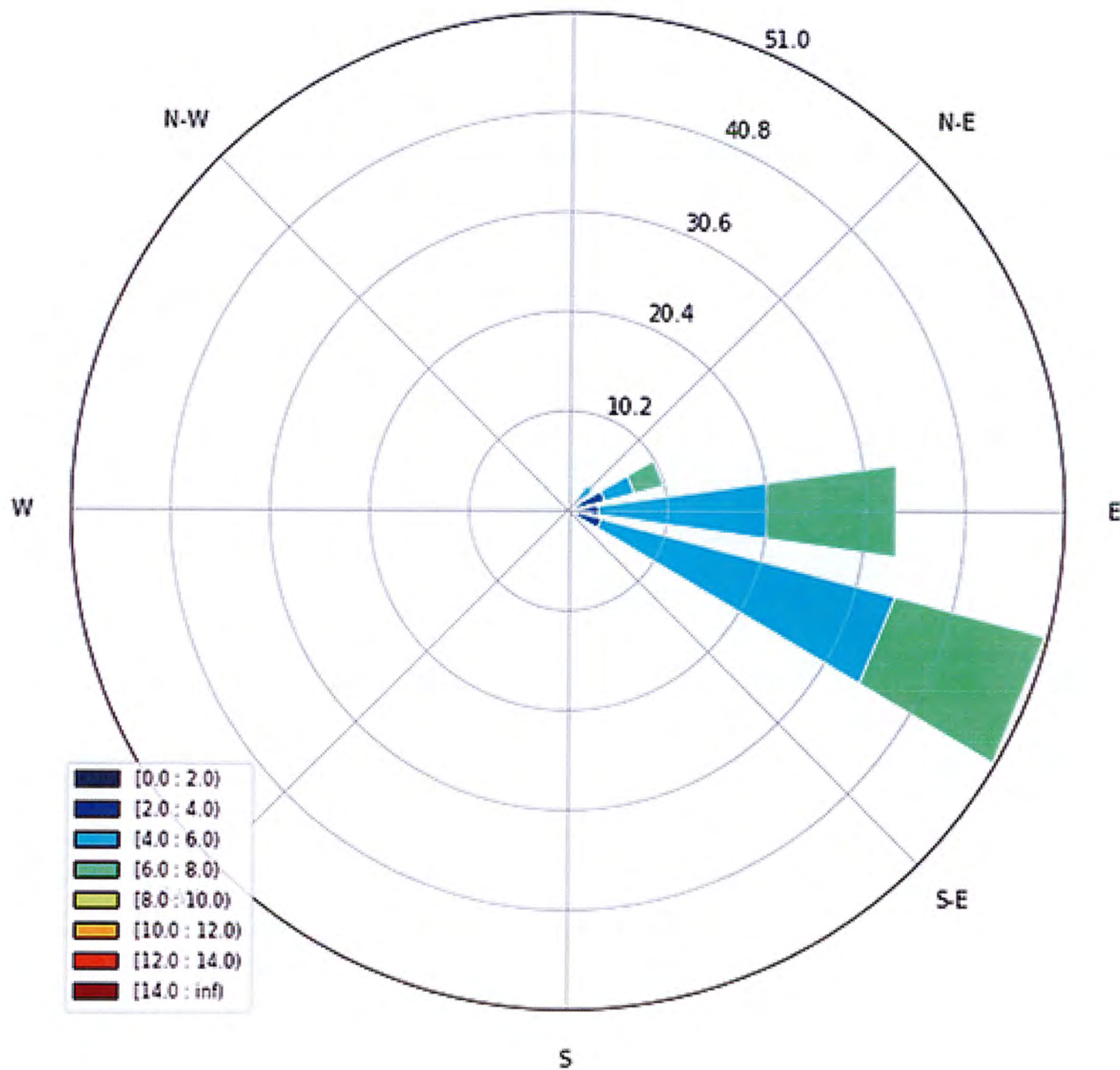
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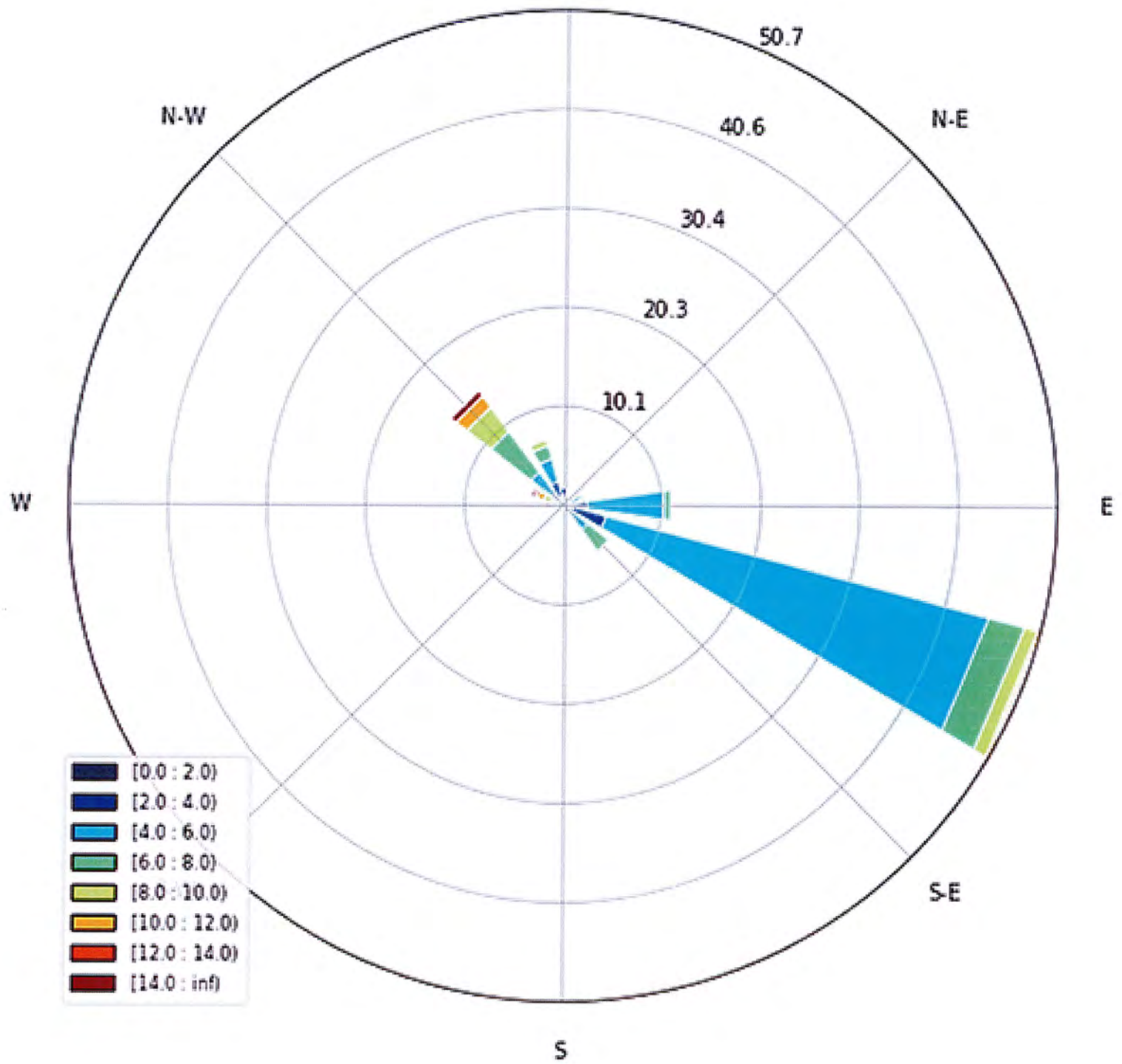
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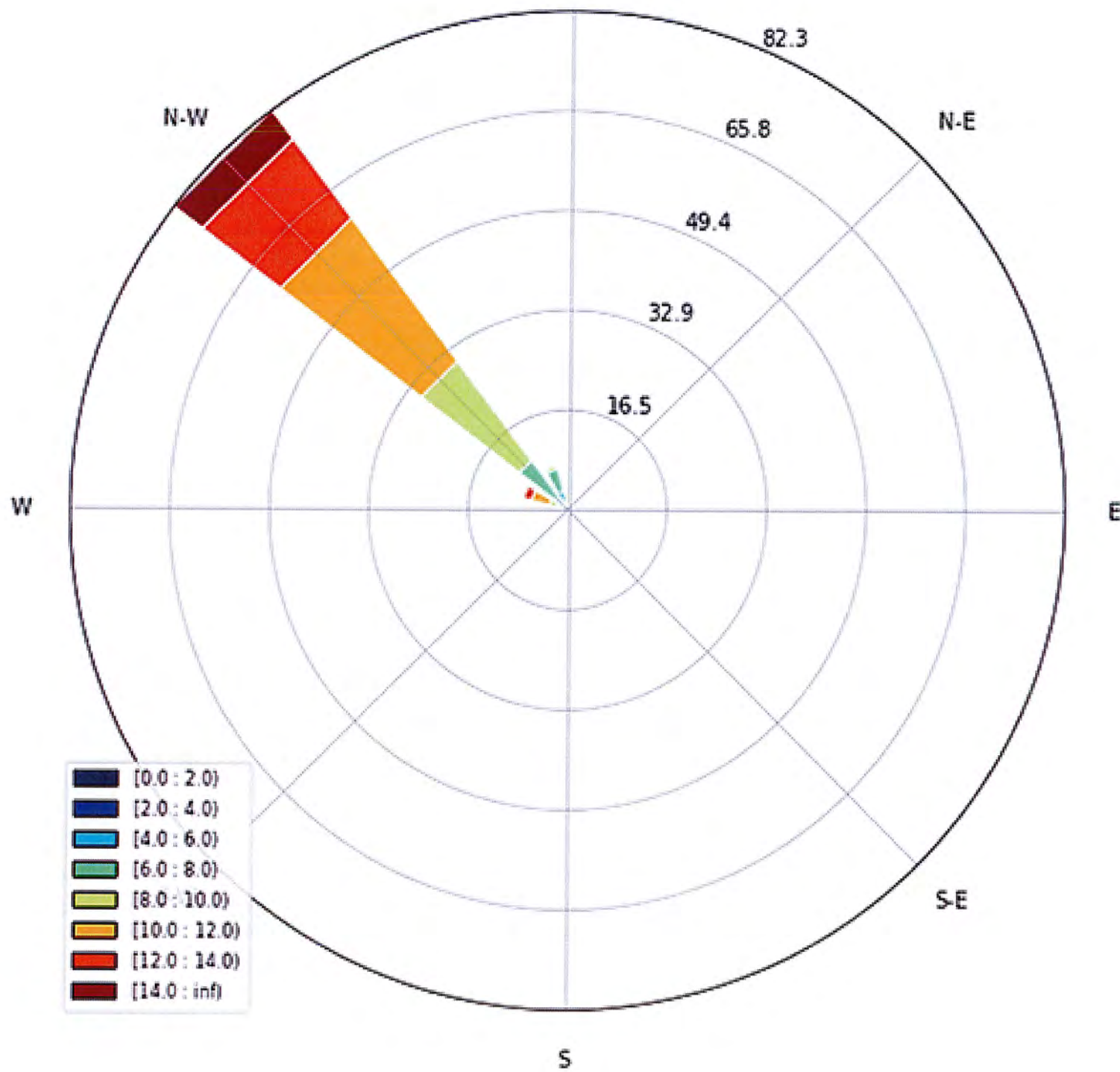
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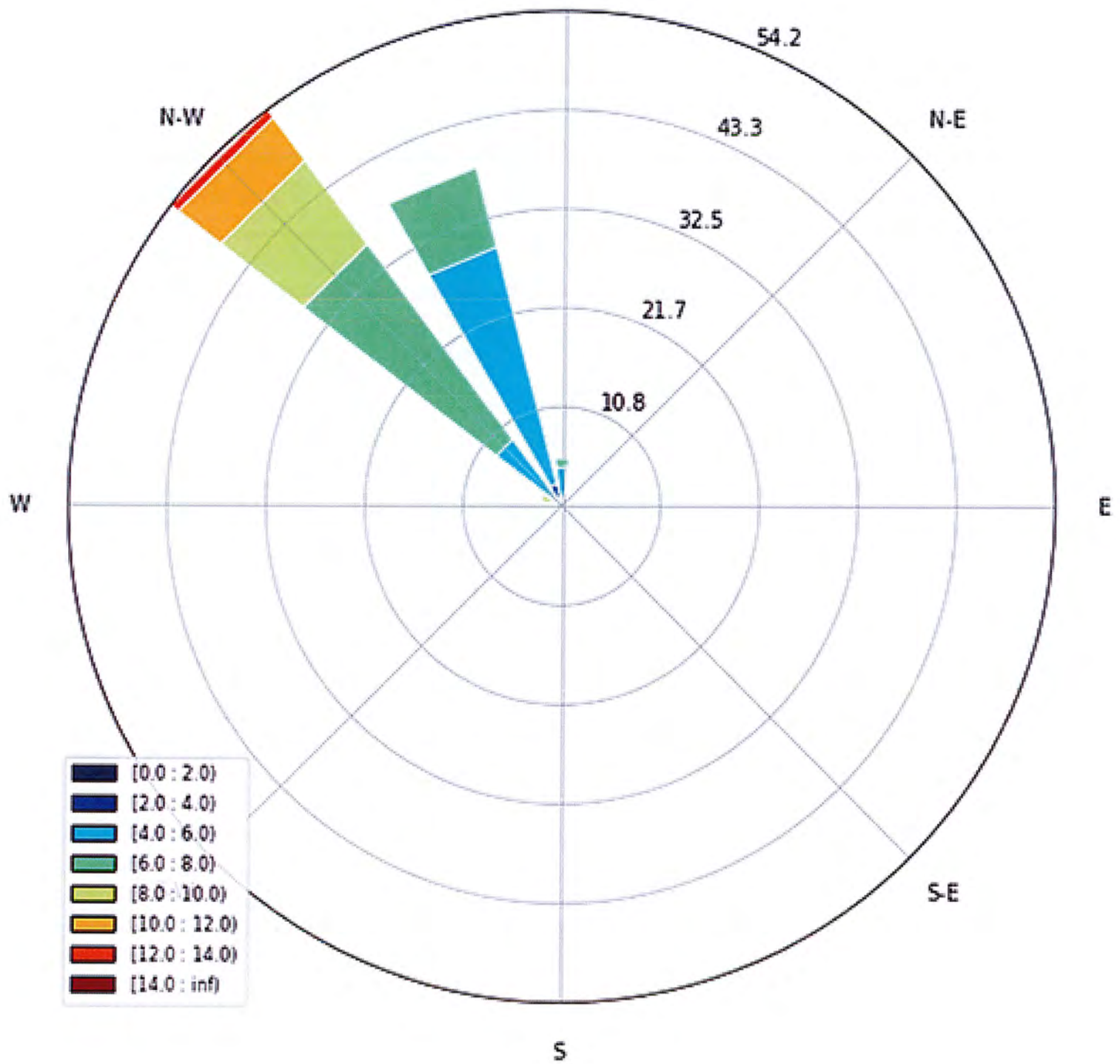
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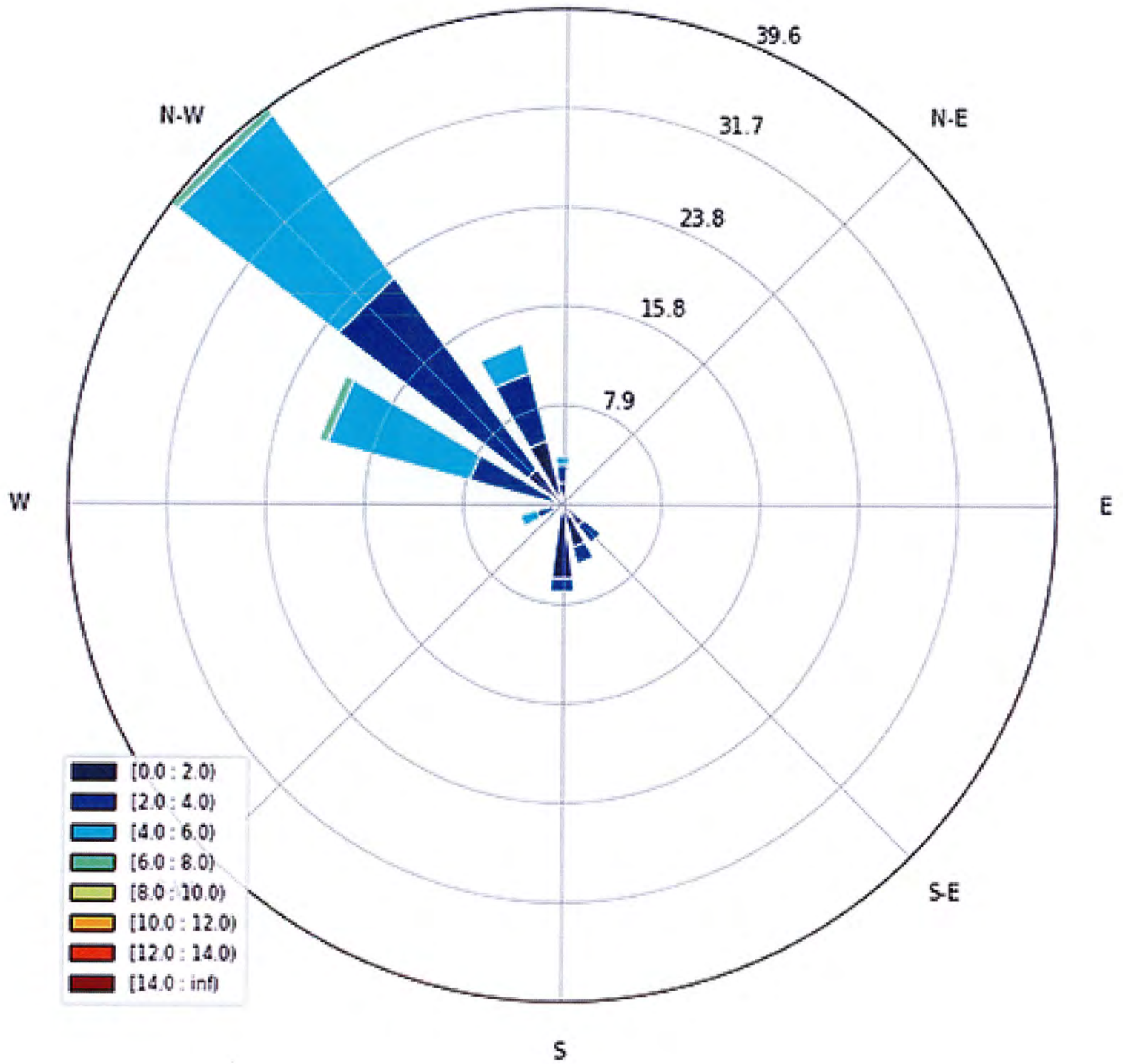


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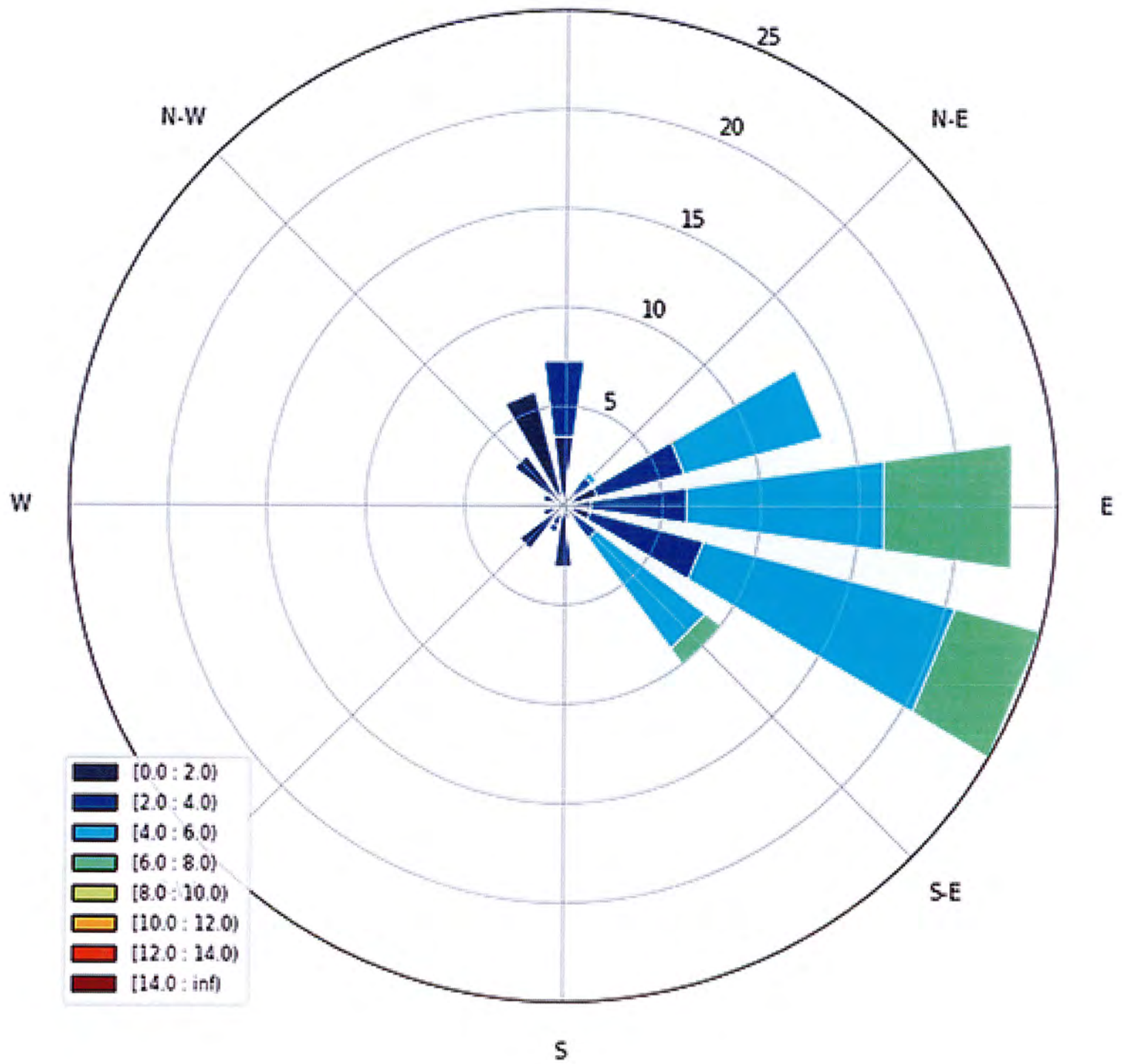


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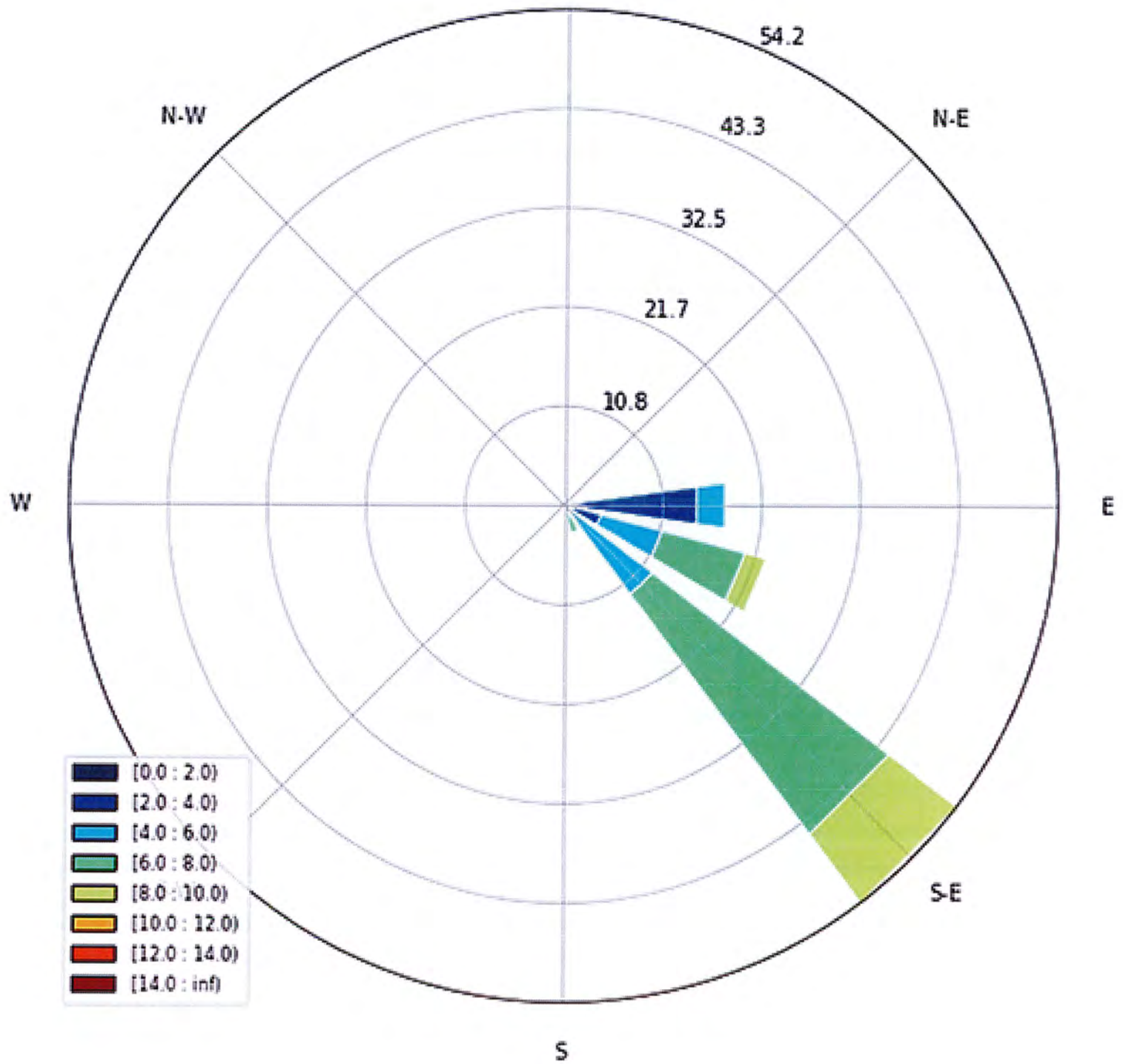




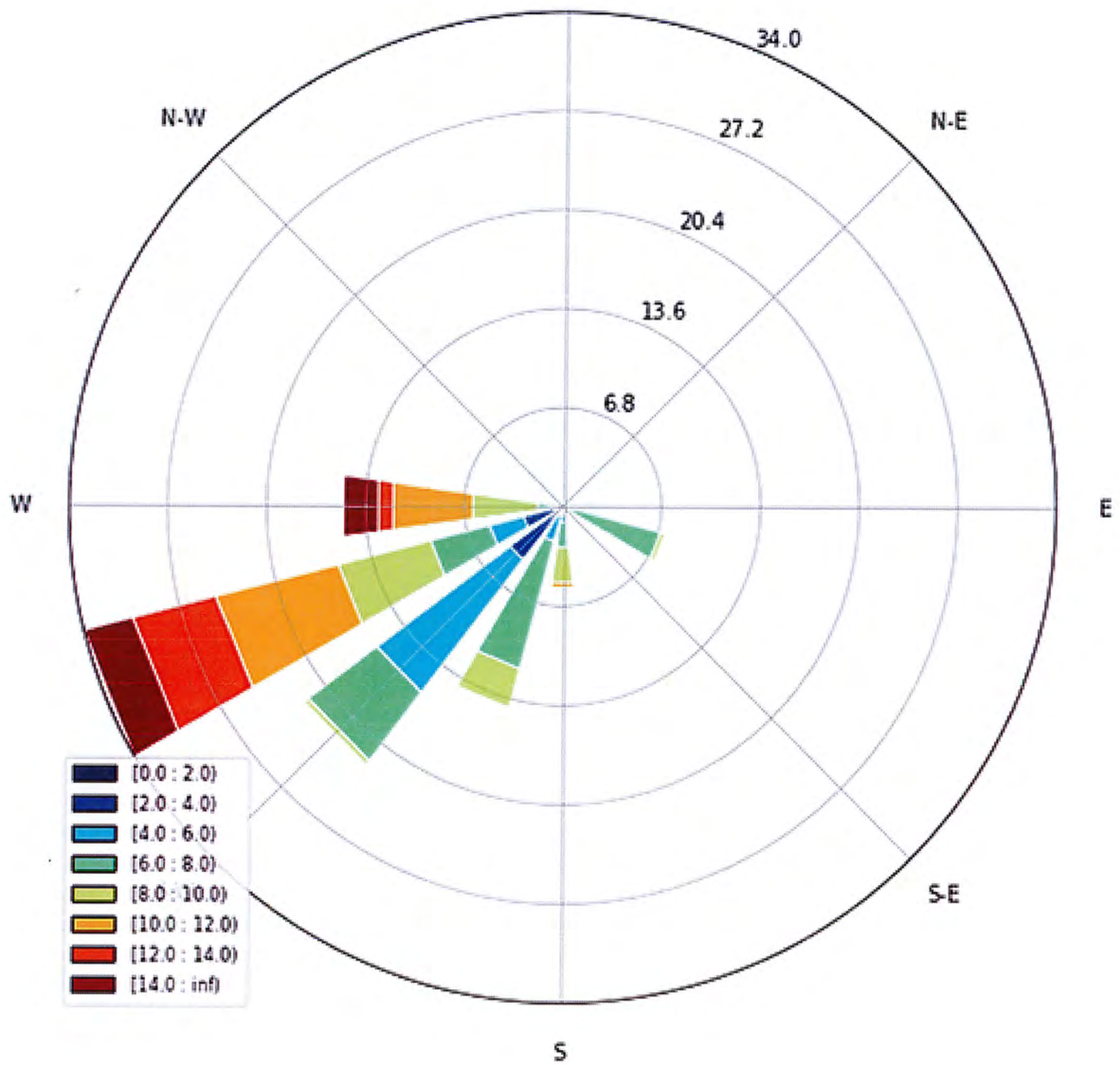
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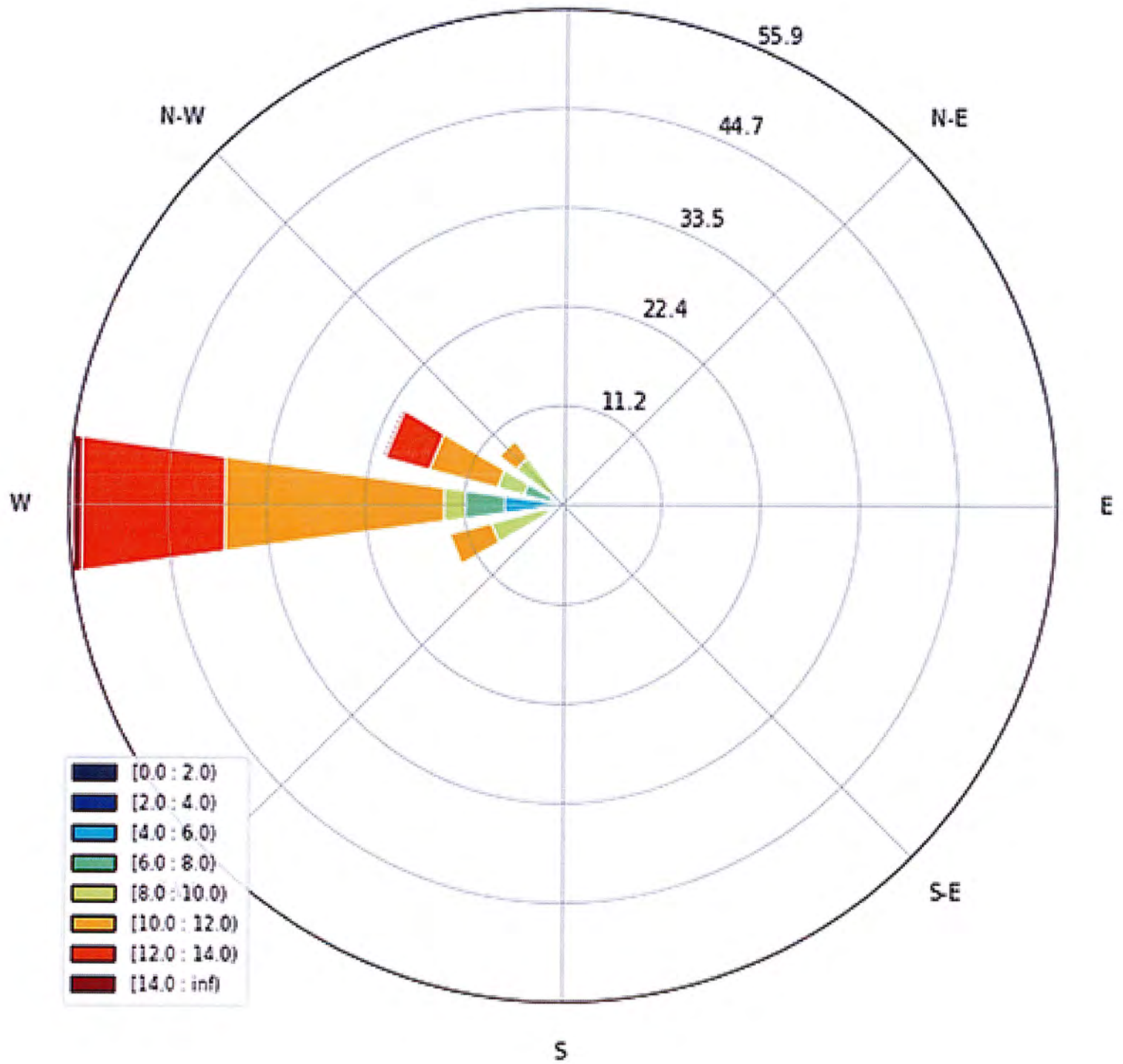
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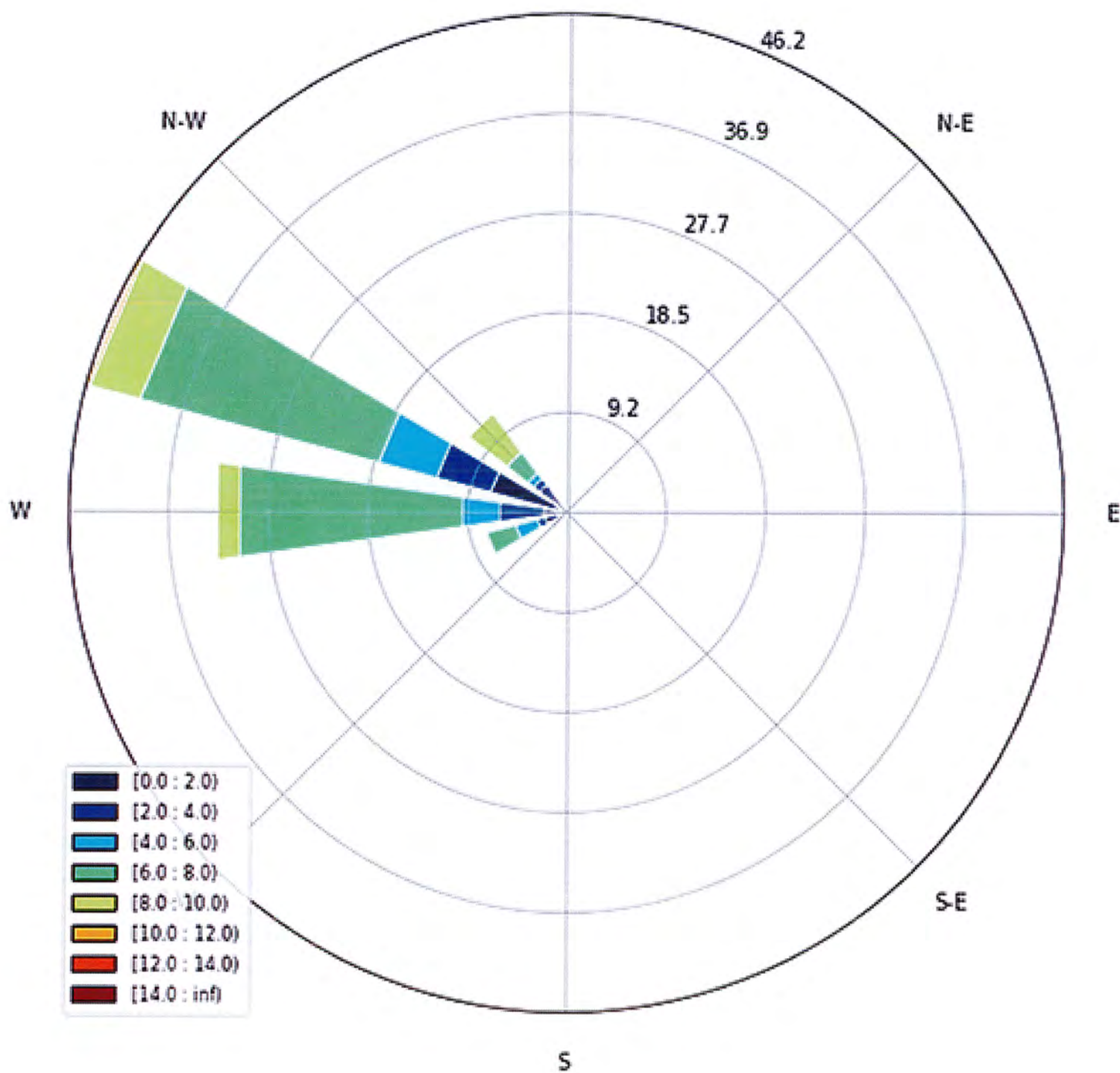
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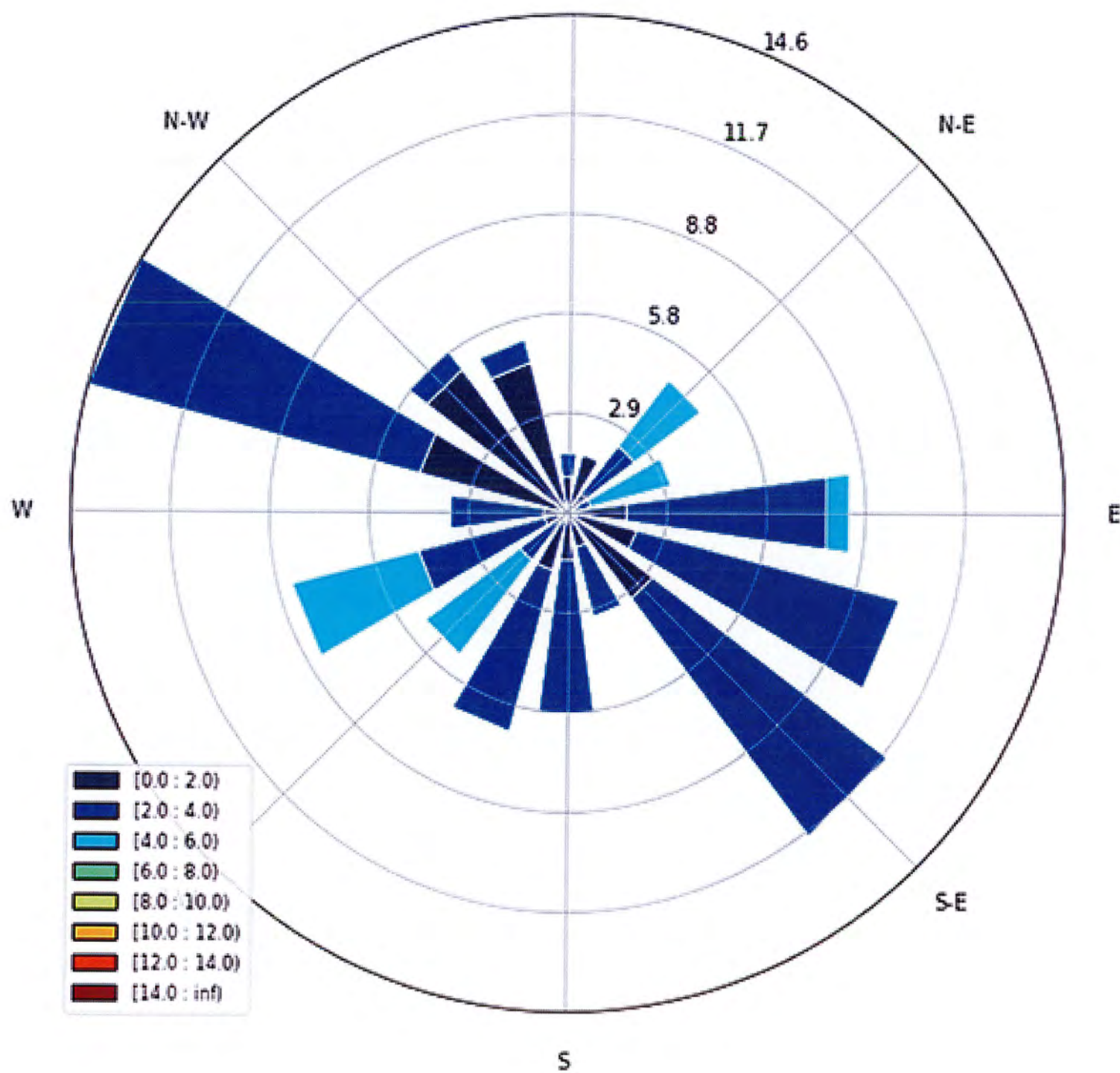
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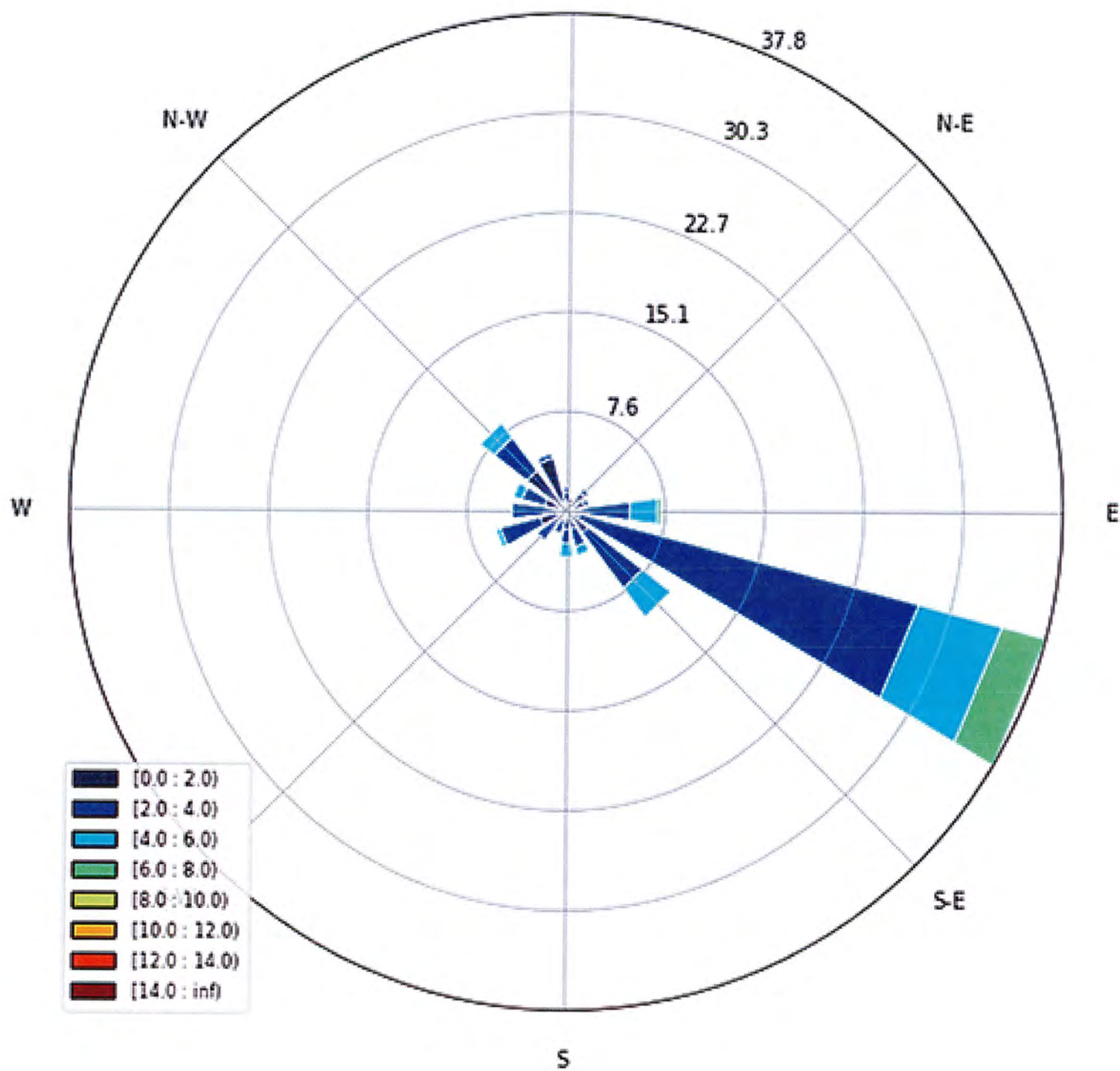
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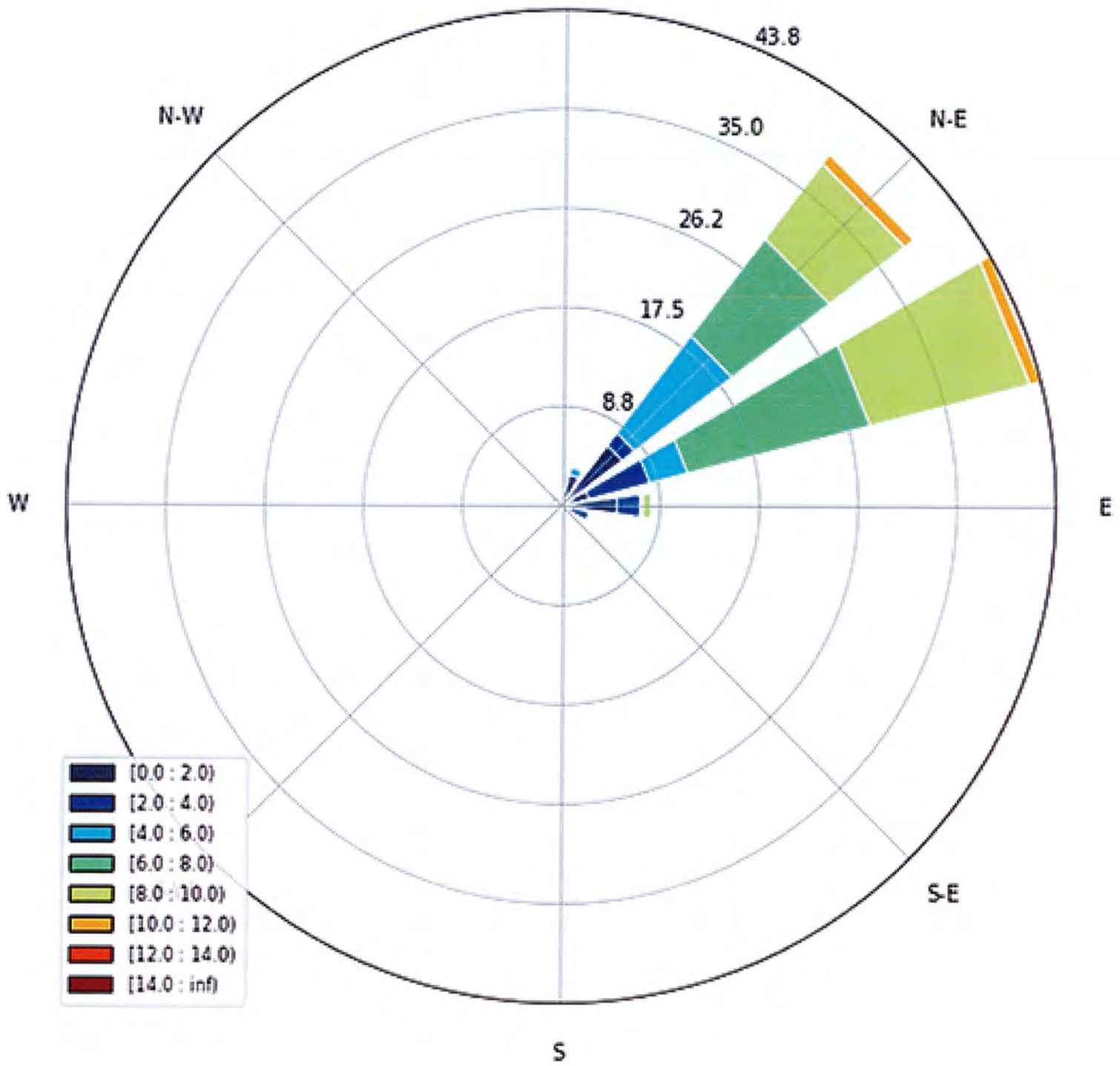
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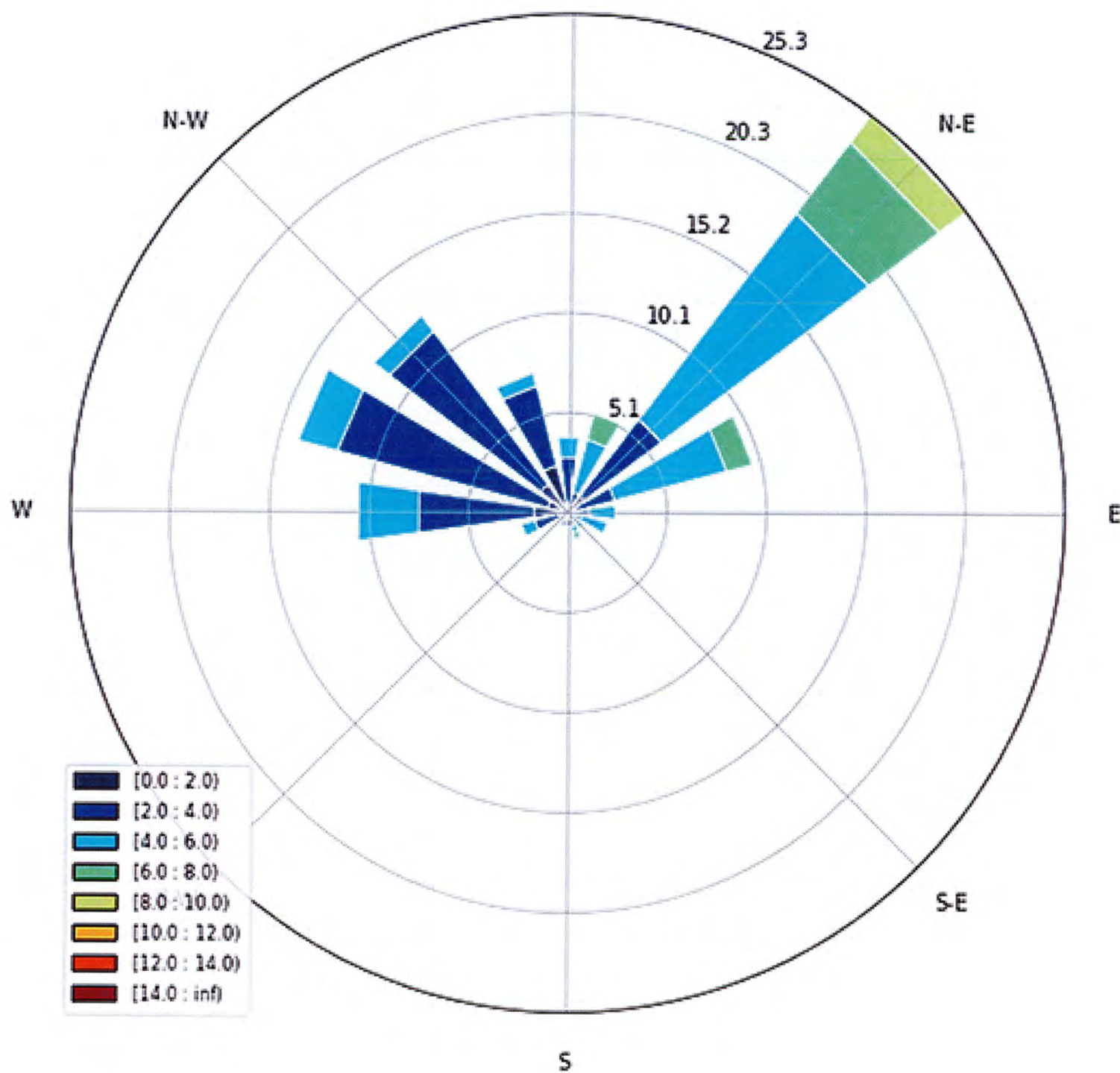
FPC: Dec 17 2018



FPC: Dec 18 2018



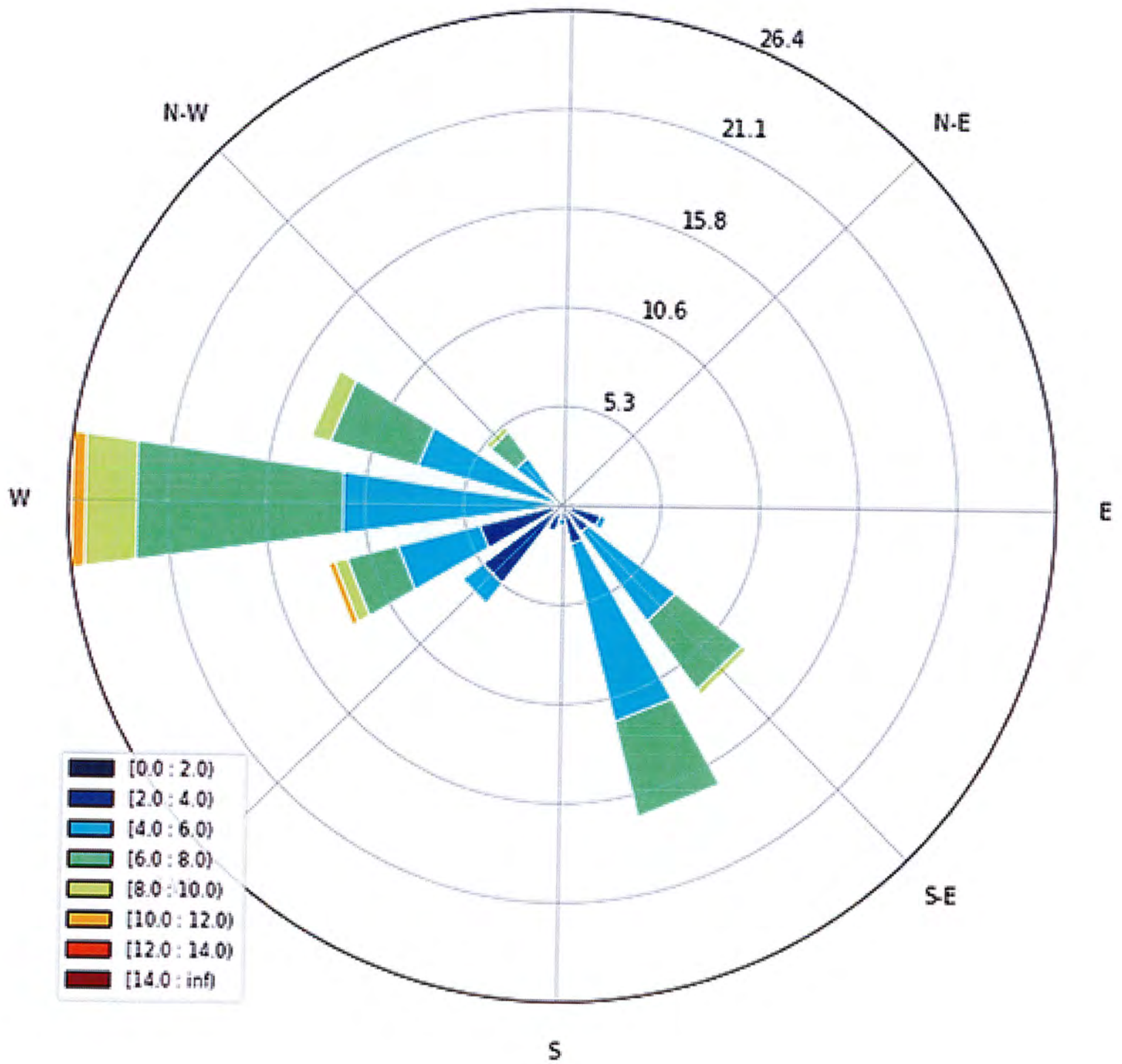
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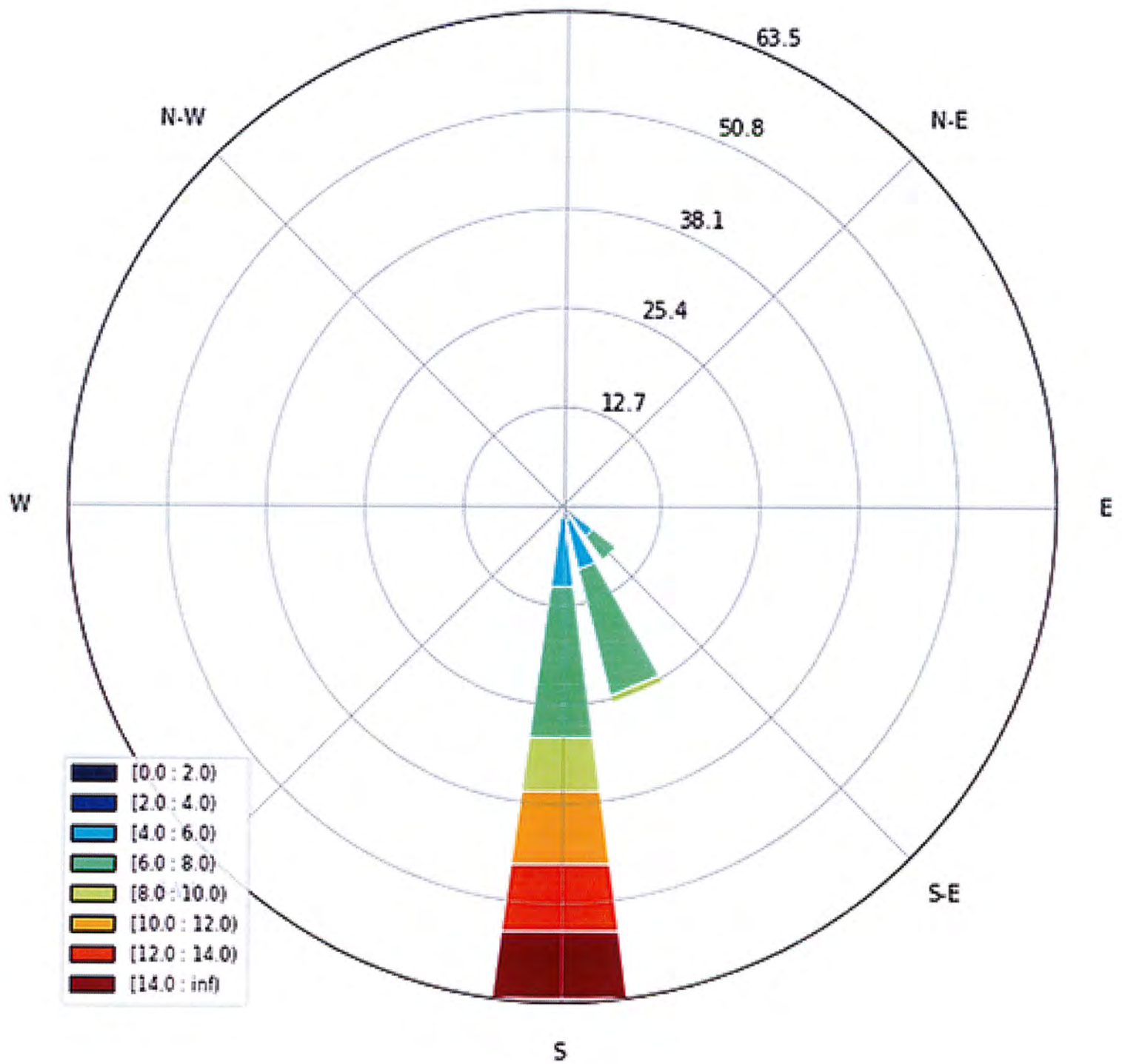
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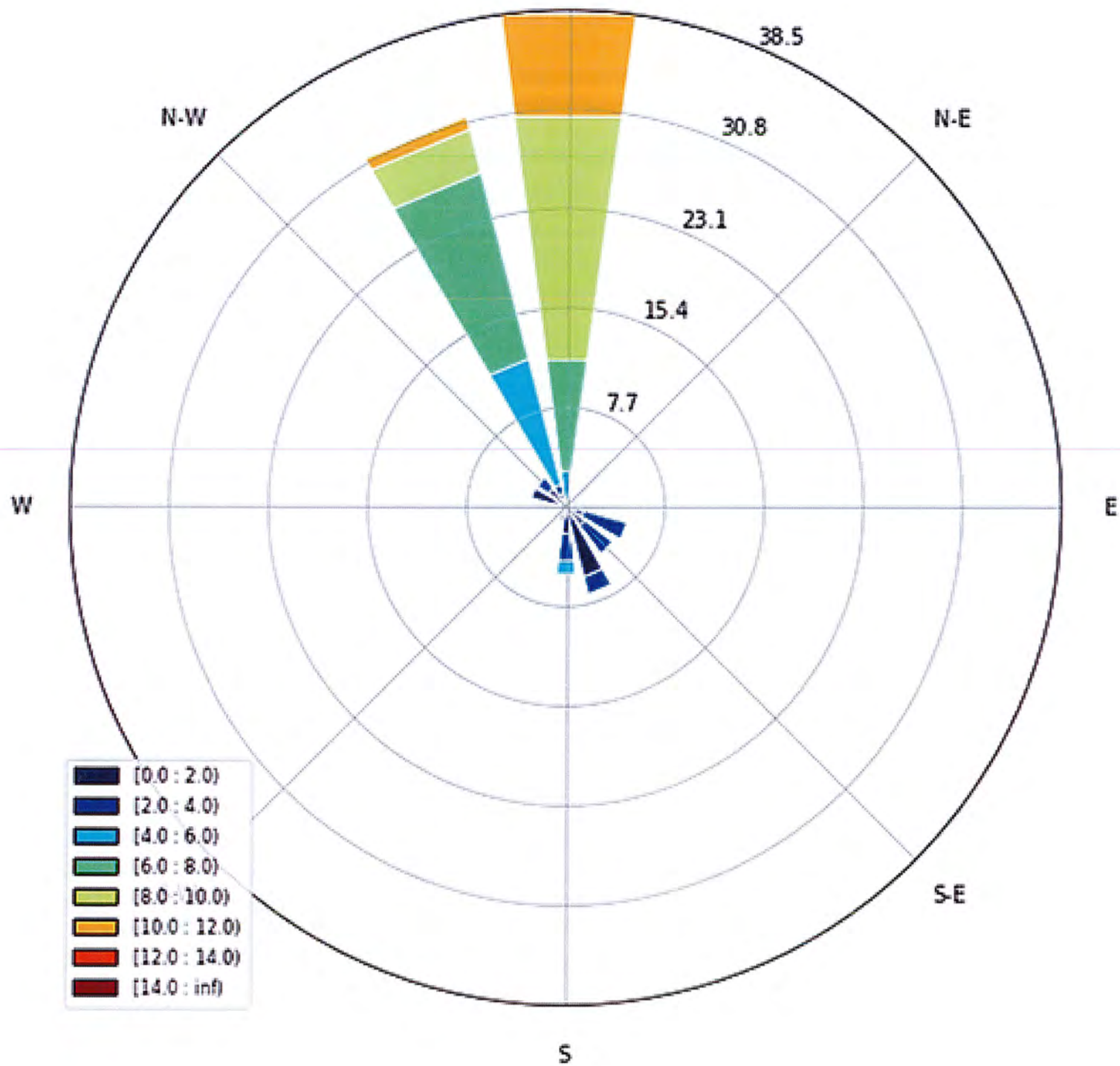
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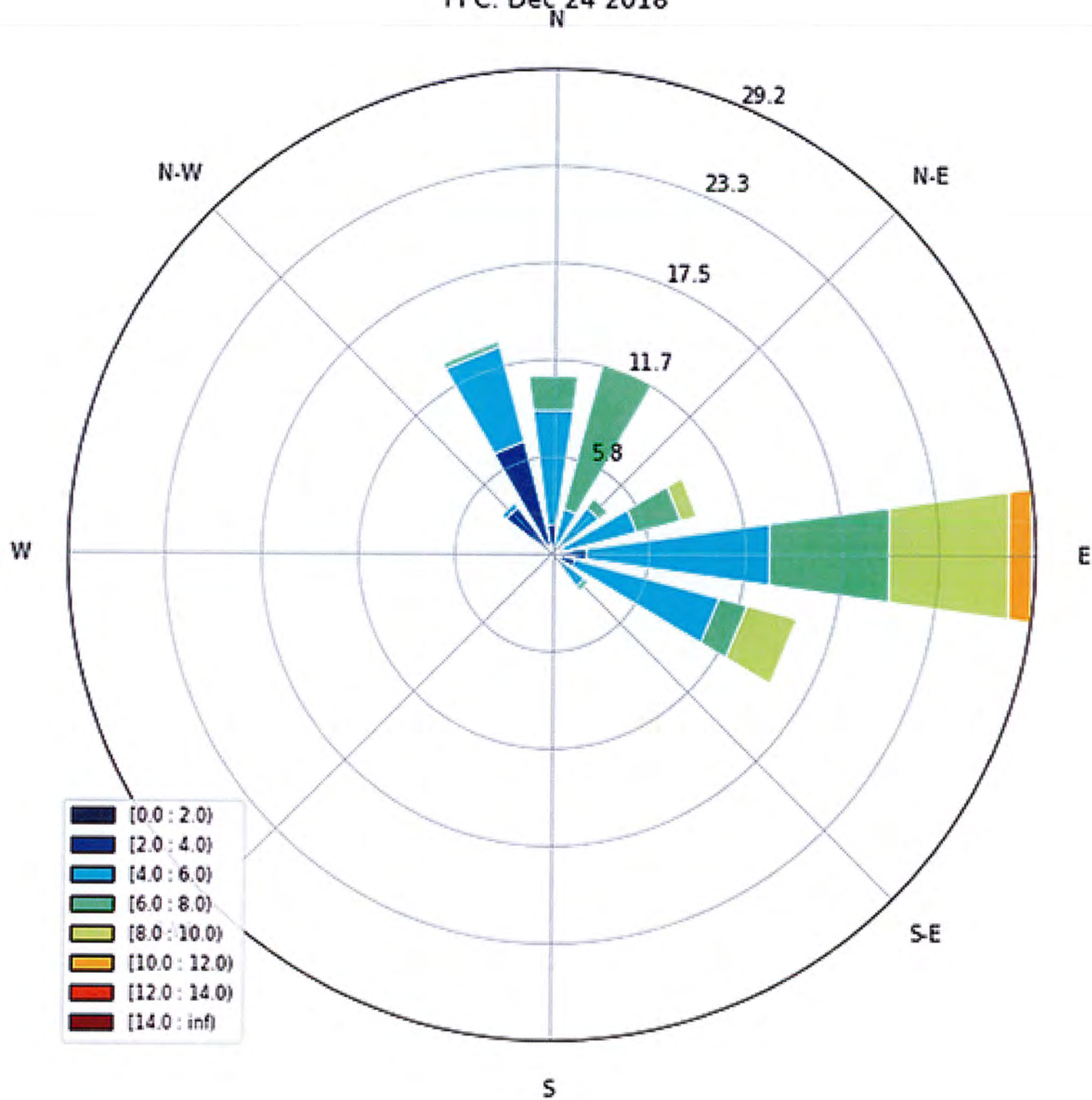
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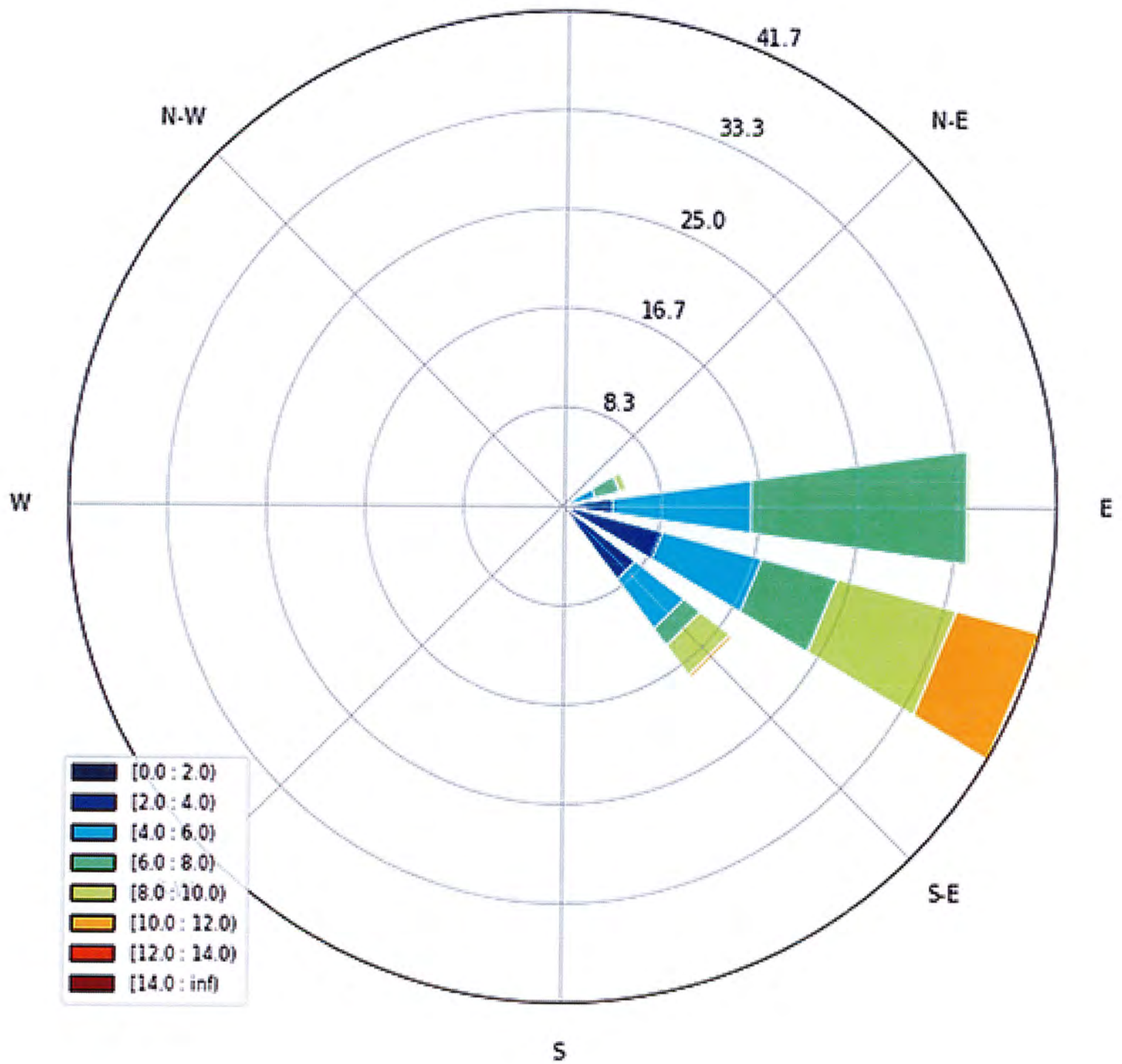
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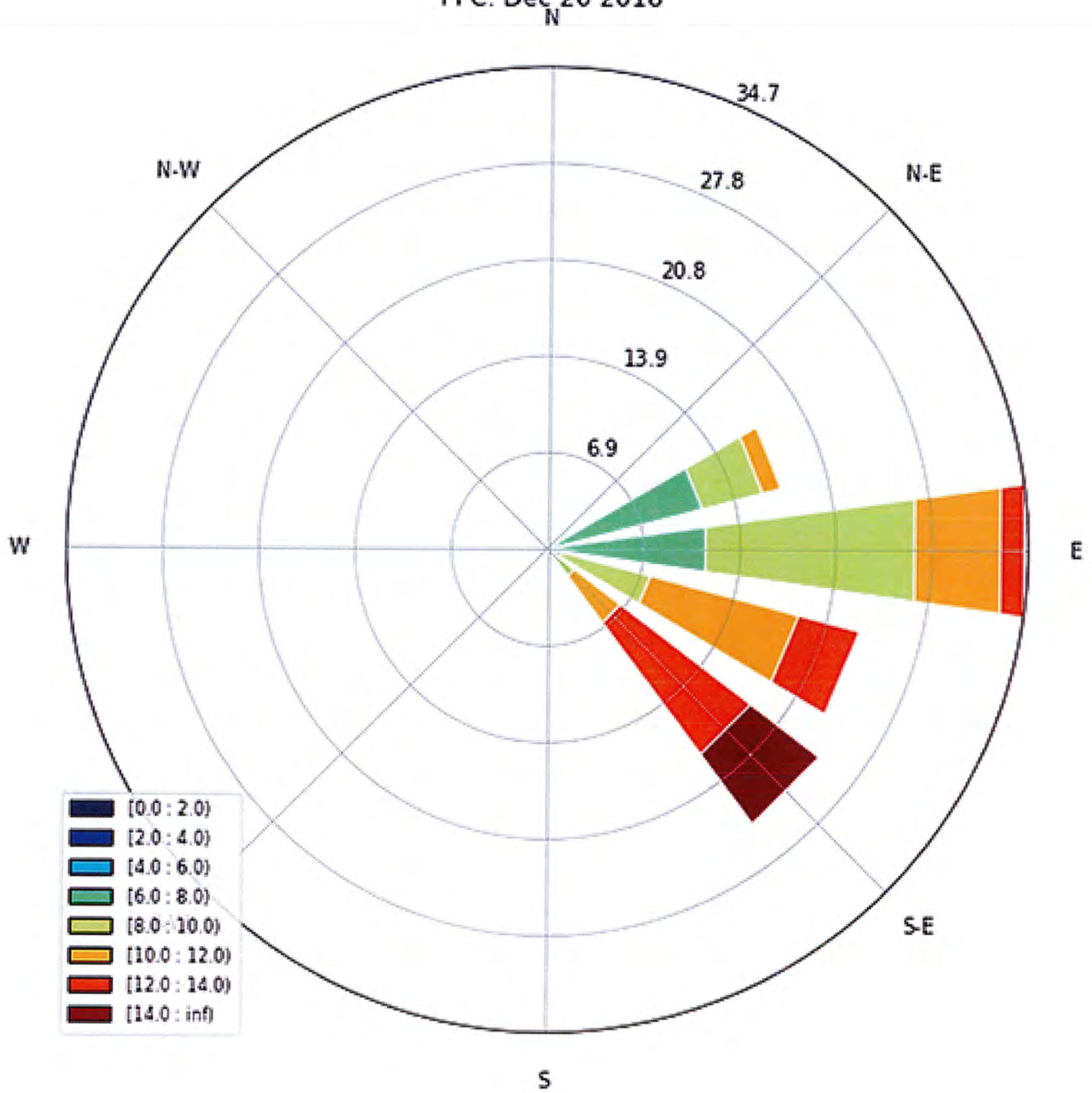
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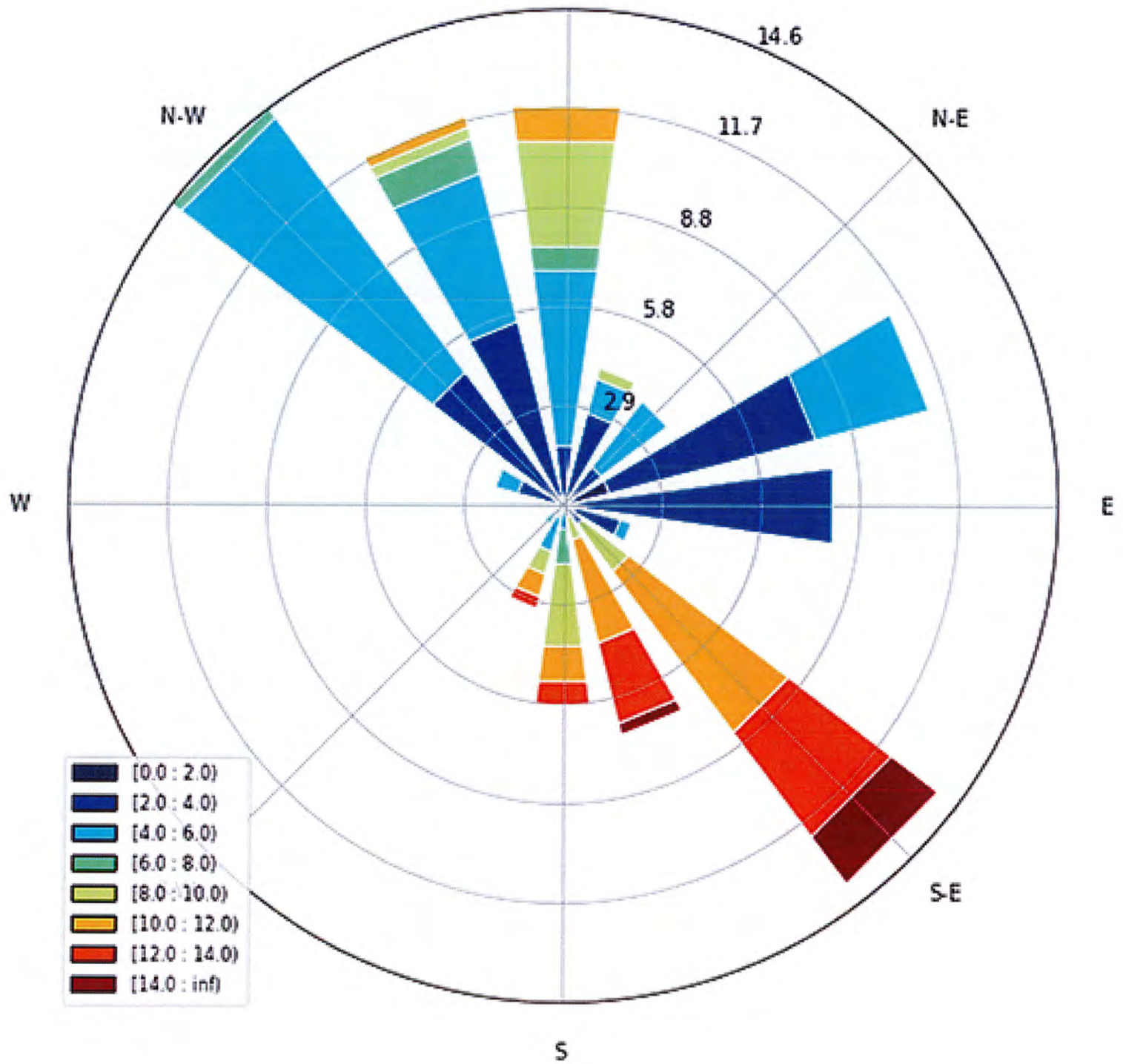
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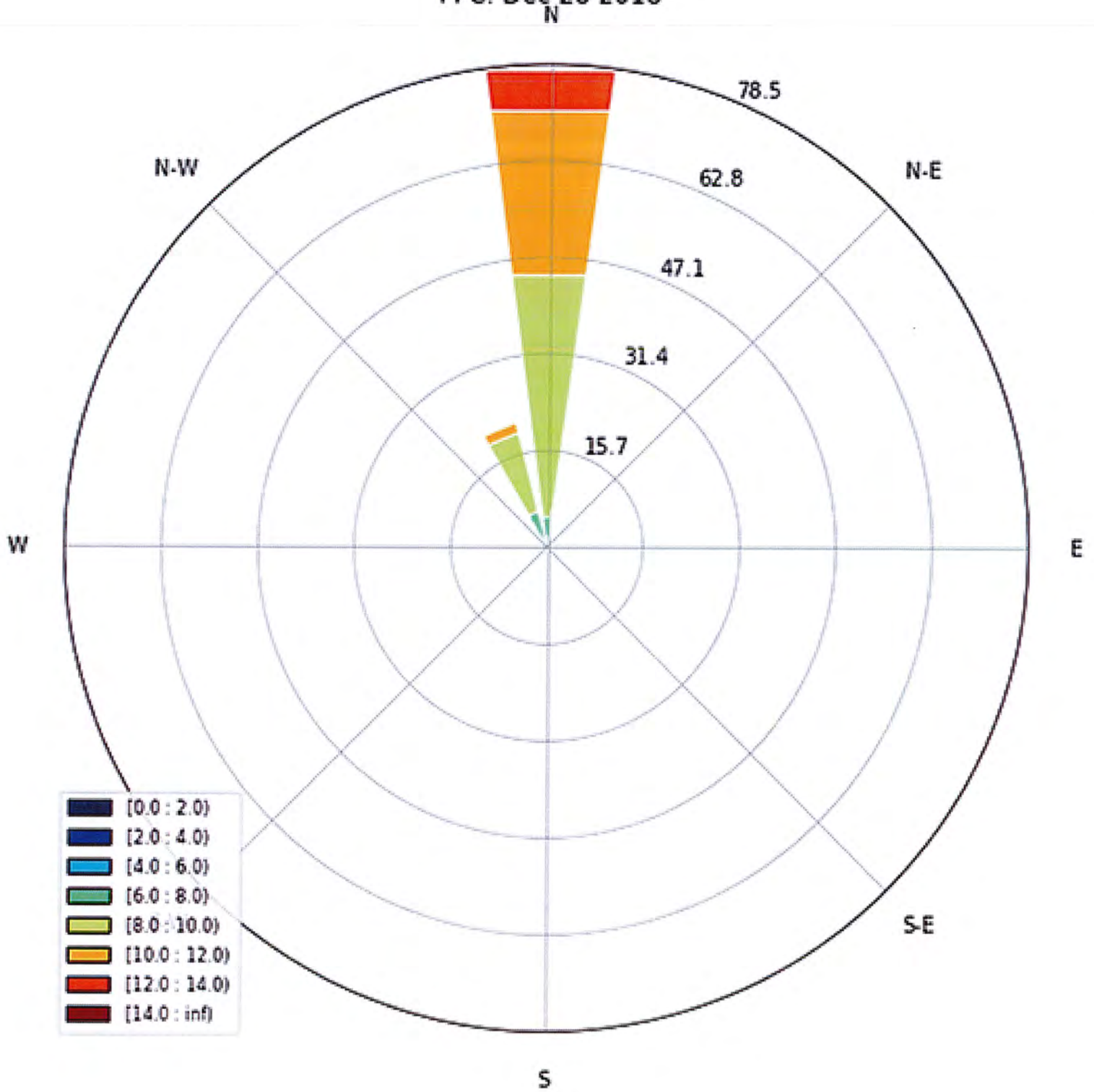
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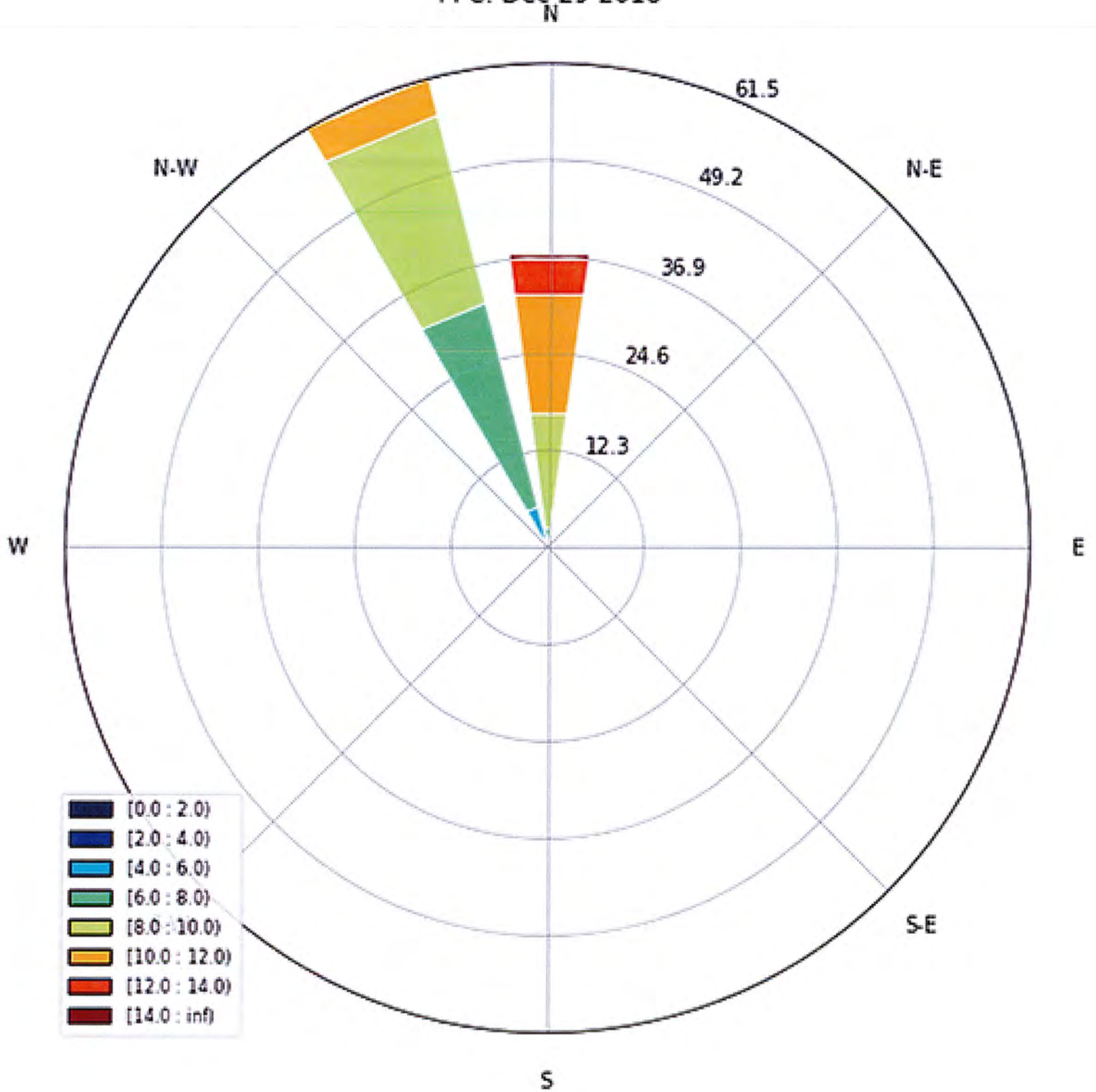
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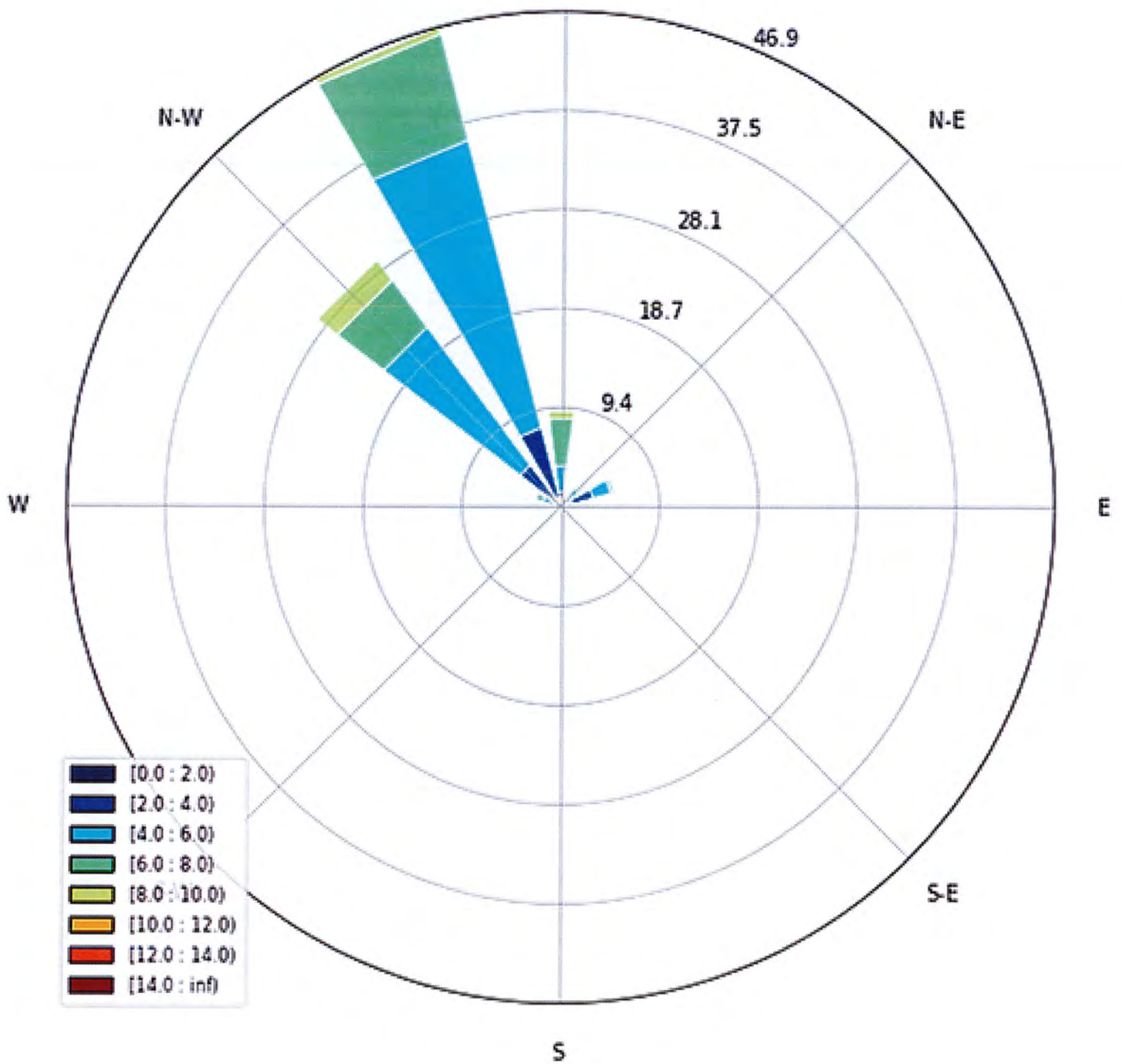
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FPC: Dec 29 2018



FPC: Dec 30 2018



N

